

**EFFECTIVENESS OF NURSING CARE ON CLIENTS WITH  
CONGESTIVE CARDIAC FAILURE AT MELMARUVATHUR  
ADHIPARASAKTHI INSTITUTE OF MEDICAL SCIENCES  
AND RESEARCH**

**By  
Ms. G.VIJAYALAKSHMI**



**A Dissertation submitted to  
THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY,  
CHENNAI.**

**In partial fulfillment of the requirement for the degree of  
MASTER OF SCIENCE IN NURSING**

**MARCH - 2010**



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**By  
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**M.Sc. (Nursing) Degree Examination,  
Branch I - Medical Surgical Nursing,  
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# CERTIFICATE

This is to certify that **“EFFECTIVENESS OF NURSING CARE ON CLIENTS WITH CONGESTIVE CARDIAC FAILURE AT MELMARUVATHUR ADHIPARASAKTHI INSTITUTE OF MEDICALSCIENCES AND RESEARCH”**, is a bonafide work done by **MS. G. VIJAYALAKSHMI**, Adhiparasakthi College of Nursing, Melmaruvathur, in partial fulfillment for the University rules and regulations towards the award of the degree of M.Sc. (Nursing), **Branch-I, Medical Surgical Nursing**, under our guidance and supervision during the academic year 2008 - 2010.

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**Internal Examiner**

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**External Examiner**

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# **CHAPTER – 1**

## **INTRODUCTION**

Health is a state of being well and using every power the individual possess to the fullest extent. It is an experience that is often expressed in terms of wellness and illness and may occur in the presence or absence of disease or injury. Nursing is the unique function of the Nurses that is to assist the individual in the performance of those activities contributing to health or its recovery that he would perform unaided if he had the necessary strength, will or knowledge.

An impairment of body structure and function that necessitates a modification of patient's normal life and has persisted over an extended period of time. A nation of healthy people can do those things which make life worth while and as the level of health inverses so does the potential for happiness.

Heart is one of the vital organ in the human body which is a durable efficient pump. The human heart works tirelessly from the moment of formation and until the moment it stops. On an

average life time the human heart beats more than two and half billion times without over pausing to rest. The heart provides the power which is needed for life.

Congestive cardiac failure is a complex clinical syndrome that can result from any cardiac disorder such as ischemic heart disease, hypertension, hyperlipidemia, diabetes mellitus, smoking and atherosclerotic arterial disease that impair the ability of the ventricle to pump out blood. Congestive cardiac failure is one of the commonest cardiac disorders associated with poor prognosis. The overall mortality rate is 50 percent.

In cardiovascular diseases, congestive cardiac failure is fourth leading causes of mortality. Early detection, diagnosis and treatment of congestive cardiac failure will lead to good prognosis and prevent the associated complications. Nursing care play a vital role for the clients with congestive cardiac failure especially in intensive care unit in order to prevent the complications.

In general, congestive cardiac failure can occur at any age, but its incidence rises with age. The actual incidence is dependent



upon predisposing risk factors. However, in the future, as demographics shift and the mean age of the population increases, a larger percent of clients presenting with congestive cardiac failure may increase.

Since a patient with acute heart disease may experience cardiac arrest at any time during the day or night obviously someone specially trained in cardiac resuscitation techniques must attend these patients 24 hours a day during the period of greatest risk. Because traditional hospital organization has been built around the idea that a Nurses be available around the clock in the vicinity of all hospitalized patients and because the early and critical steps in cardiac resuscitation can be carried out by specially trained Nurses.

The operational strategy for intensive care unit on the trained Nurses specialist in coronary care, furthermore the coronary care Nurses has unparalleled opportunities for expanded professional responsibility by assuming an active role in making decisions about medical diagnosis requiring immediate action and about therapy in situations in which a life may hang in the balance, some

would prefer use the word diagnosis to describe Nurses role in these common coronary care unit situation. Instead they would say that the Nurses makes a judgment that a dangerous condition is present. Operationally and practically no distinction is made in the well run coronary care unit.

During this critical situation Nurses must act as an early detector of the problems and institute effective treatment to resolve the problems. Awareness of problems is the key to overcome the problems. Apart from the analytical, managerial and communication skills the Nurses should posses problem solving abilities which may help our Nursing professionals in discharging quality of patient care.

The skilled coronary care, Nurses will be readily recognizable by the patients because of her calm competent approach to her duties. The performance of individualized Nursing care which she knows will contribute to the patient's comfort and safety is daily evidence of her knowledge and expertise.

## **NEED FOR THE STUDY:**

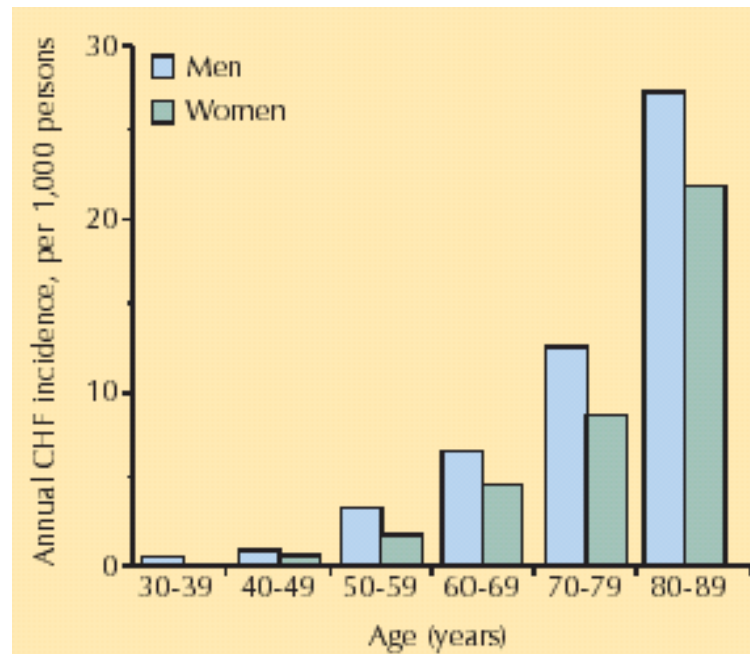
Congestive cardiac failure is a common, costly, disabling and deadly condition. Congestive cardiac failure is associated with significantly reduced physical and mental health, resulting in a markedly decreased quality of life.

Cardiovascular diseases account for 12 million deaths annually through out the world(2008), congestive cardiac failure continues to be a significant problem in industrialized countries and is becoming on increasingly significant problem in developing countries.

At global level Congestive cardiac failure is the leading cause of death in the United States as well as in most industrialized nations throughout the world. Currently about five million people in the United States are affected and inspite of a better awareness of presenting symptoms 2,50,000 die prior to presentation to a hospital. The survival rate for united state patients hospitalized with congestive cardiac failure is 90 percent to 95 percent. This represents a significant improvement in

survival and is related to improvements in emergency medical response and treatment strategies.

### **Morbidity statistics of congestive cardiac failure**



**Source : British Heart Foundation**

At National level according to the **National Health Surveys (2008)**, estimated 4.8 million cases have congestive cardiac failure with equal numbers of men and women. Almost 1.4 Million are under 60 years of age. Congestive cardiac failure is present in 2 percent of persons age 40-59, more than 5 percent of persons age 60-69 and 10 percent of persons age 70 and older. In developing countries, around 2 percent of adults suffer from cardiac failure, but in those over the age of 65, this increases to 6-10 percent. So

the investigator selected this topic to know the effectiveness of Nursing care on clients with congestive cardiac failure.

## **STATEMENT OF THE PROBLEM**

EFFECTIVENESS OF NURSING CARE ON CLIENTS WITH CONGESTIVE CARDIAC FAILURE AT MELMARUVATHUR ADHIPARASAKTHI INSTITUTE OF MEDICAL SCIENCES AND RESEARCH MELMARUVATHUR.

## **OBJECTIVES**

1. to assess the health status of the clients with congestive cardiac failure.
2. to evaluate the effectiveness of Nursing care on clients with congestive cardiac failure.
3. to find out co-relation between the selected demographic variables with health status assessment and evaluation score on clients with congestive cardiac failure.

## **OPERATIONAL DEFINITION**

### **Effectiveness**

It refers to outcome in Nursing care and promote the health status of clients with congestive cardiac failure which are assessed and evaluated by structured tool.

### **Nursing care**

The Nursing care refers to the complete Nursing intervention done by the scholar such as assessment of vital parameters, improving gas exchange and oxygenation, improving cardiac functions, comfort positioning, fluid and electrolyte balance, administration of medications, dietary management, reduction anxiety and health promotion provided by the scholar to clients with congestive cardiac failure from admission to till the time of discharge.

### **Clients**

The client refers to those who got admitted in Melmaruvathur Adhiparasakthi Institute of Medical Sciences and Research and diagnosed as congestive cardiac failure by the physician.

## **Congestive Cardiac failure**

It refers to the heart's inability to pump adequate amount of blood to meet the demand of the body.

### **ASSUMPTION**

- Appropriate and timely Nursing cares to clients with congestive cardiac failure may leads good prognosis and prevent complications and help for speedy recovery.
- Clients who have a higher level of knowledge of cardiac disease and who practice preventive methods have less chance of complications.
- Knowledge of the people have got a strong influence on the adaptation of healthy behavior and promote quality of life.

### **LIMITATIONS**

- The studies will be limited to six weeks only.
- Samples will be selected in Intensive Care Unit
- This study cannot be generalized.

## **PROJECTED OUTCOME**

- Nursing interventions on clients with congestive cardiac failure will promote comfort and prevent complications and will improve the quality of life.



## CONCEPTUAL FRAMEWORK

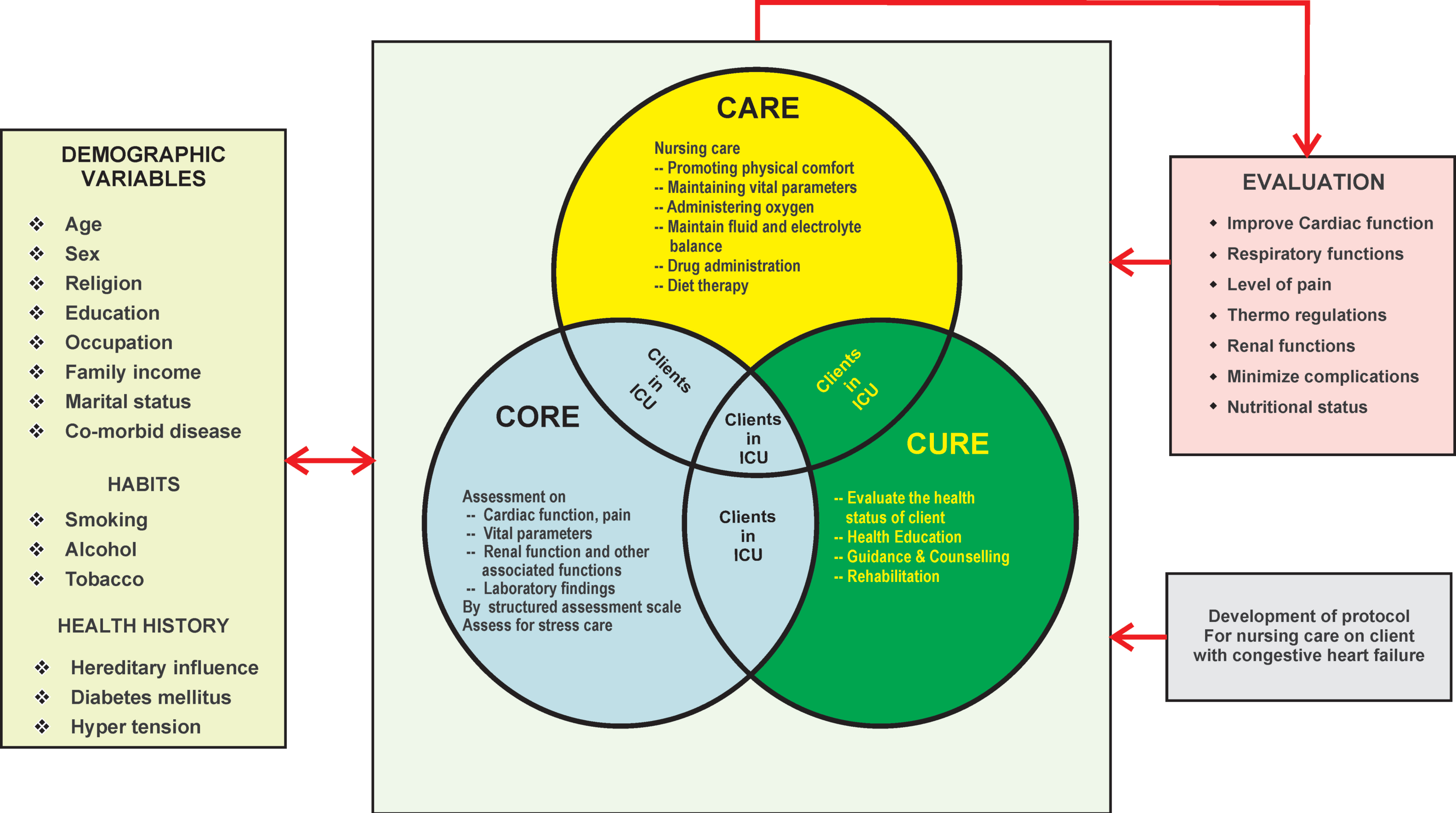
A conceptual frame work refers to concepts that structure or offer frame work of predispositions for conducting research. The study is design to elicit the effectiveness of Nursing care of Congestive cardiac failure clients in improving health status and prevent complications. The Conceptual model for the study is based on modification made on modified Lydia Hall's theory(1975). In this theory three major components are emphasized. The core circle, the care circle and the cure circle represent specific aspects of Nursing care.

**Core:** It refers to the patients assessment on cardiac and respiratory functions renal functions monitoring pain, dietary pattern , fluid management , laboratory findings effects on medications and other associated functions with regard to demographic variables like age, sex, religion , education , occupation , family income , marital status , personal habits , co-morbid disease and source of information.

**Care:** It refers to clients body and nurturing aspect of Nursing care. It involves Nursing care such as maintain vital parameters , promoting physical comfort, administering oxygen, maintaining fluid and

electrolyte balance , drug administration, providing diet and client education regarding health promotion.

**Cure** : It refers to the outcome of the treatment that is effectiveness of Nursing care on clients with congestive cardiac failure it involves helping a client and family members through medical, surgical and rehabilitative measures instituted by the physician.



**MODIFIED LYDIA HALL'S CORE, CARE, CURE THEORY (1975)**

## **CHAPTER - II**

### **REVIEW OF LITERATURE**

Literature review involved the systematic identification location scrutinizing and summary of written materials that contained information on research problem under study. A review of literature of the present study was aimed to prove the effectiveness of Nursing care on clients with congestive cardiac failure.

It was actively involved in searching an information relevant to the topic and developing on knowledge which support and guide for the study. Review of literature relevant to present study is aimed at identifying the case of congestive cardiac failure among the adults. It is an essential component of research study as it provides a broad understanding of all research problems. Keeping this in mind the investigator had made a thorough study on available source which has been helpful in projecting the widened.

Review of Literature is presented under the following headings

Part – I : Literature related to causes of congestive cardiac failure.

Part – II : Literature related to management of congestive cardiac failure.

Part – III : Literature related to Nursing care of clients with congestive cardiac failure.

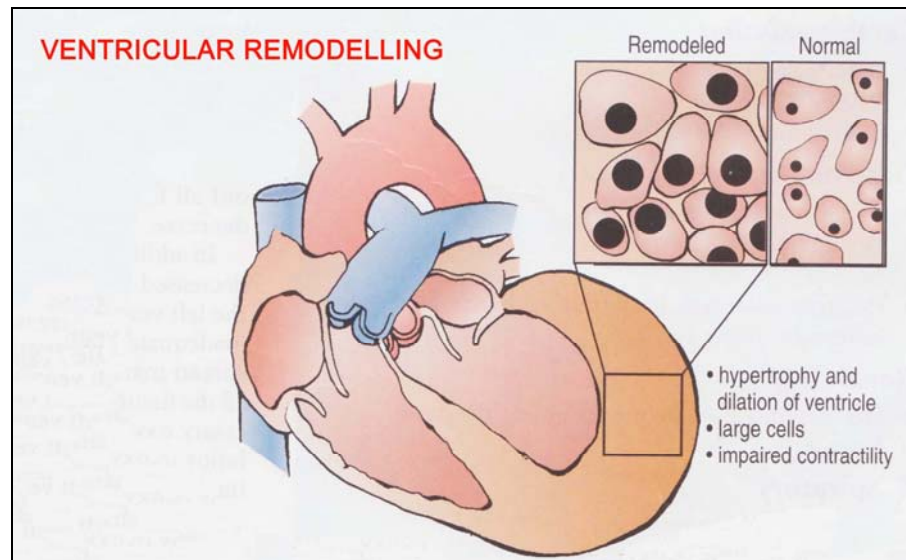
Part – IV : Literature related to nutrition

Part – V : Literature related to exercises

**Part – I : Literature related to causes of congestive cardiac failure.**

**Hodges P. (2009)** stated that congestive cardiac failure is a disease of epidemic proportions in the United States affecting almost six million people. This congestive cardiac failure overview includes a brief description of the etiology of this extremely prevalent coronary artery disease. Myocardial (ventricular) remodeling is described as being either physiological or pathological. Patients must initially be taught that congestive

cardiac failure is a chronic and ongoing disease to comprehend the need for lifestyle changes and management of life problems.



**Source : Brunner & Suddharth**

**Pruitt AL., (2008)** reported that congestive cardiac failure is end-stage cardiac disease, developing in 46 percent of women within six years of having a myocardial infarction, and is the leading cause of all hospitalizations and readmissions in women over the age of 65 years. Since women present with atypical symptoms leading to inaccurate diagnosing of heart disease, education becomes a key component in increasing women's ability to self-manage congestive cardiac failuresymptoms and to become proactive in health-promoting behaviors.

**Sheeba (2007)** reported that neurohormonal abnormalities contribute to the pathophysiology of cardiac failure. Acute decompensated congestive cardiac failure has emerged as a major health problem associated with poor prognosis, increased costs related to care, reduced quality of life, and frequent readmissions. Symptoms of Acute Decompensated Cardiac Failure are primarily related to congestion and/or low perfusion states.

**Johansson P (2006)** stated that depression is common among patients with chronic congestive cardiac failure and leads to more symptoms of HF, decreased quality of life, and an increased risk for premature death. Depressed cardiac failure clients also use more health care resources, which increases the economic burden on the health care system.

**Evangelista LS, Miller PS. (2006)** revealed that the factors that contribute to increasing the risk for cardiac failure, particularly the persistent rise in prevalence of overweight and obesity may be imperative to reducing the burdens of this poorly prognostic

disease process. Overweight and obesity have been associated with increased morbidity and mortality. This article reviews data supporting both the negative and positive effects of overweight and obesity in relationship to cardiac failure with implications for future research, and describes recommendations for practice as it relates to lifestyle modification through diet, exercise, and cognitive-behavioral therapy.

CHRONIC	ACUTE
Coronary artery disease	Acute myocardial infarction
Hypertension	Dysrhythmias
Rheumatic heart disease	Pulmonary emboli
Congenital heart disease	Thyrotoxicosis
Cor pulmonale	Hypertensive crisis
Cardiomyopathy	Rupture of papillary muscle (eg. mitral valve)
Anemia	Ventricular septal defect
Bacterial endocarditis	Myocarditis
Valvular disorders	

**Source : Lewis**

**Shotter C. (2005)** revealed that congestive cardiac failure is a clinical syndrome caused by a reduction in the heart's ability to



pump blood around the body. The prevalence of congestive cardiac failure due to coronary heart disease is increasing, despite the declining overall mortality from coronary heart disease. This is thought to be due to both an increasing population and to more people surviving acute heart attacks but then experiencing residual left ventricular dysfunction. The National Service Framework sets out clear standards for the treatment of patients with cardiac failure.

**James E D and Moshiri M. (2002)** viewed that the higher risk of congestive cardiac failure seen in Gujarati immigrants is probably related to an increased fat intake and obesity which are associated with migration. Ways of improving nutrition and identifying and treating congestive cardiac failure risk factors in this population are urgently required.

**Williams R and Bhopal R. (2002)** indicated that there is evidence in support of three newer hypotheses for the high incidence of congestive cardiac failure namely, insulin resistance, stress and socioeconomic deprivation. The high congestive

cardiac failure rates in South Asians are likely to result from a complex interaction of risk factors.

**Mrs. Angela Gnanadesai (2001)** stated that the link between smoking and lung cancer has been well documented and well known smoking is also a major cause of heart and blood vessels disease. The fact that is more than 4,00,000 death in United States per year result from smoking and about 45 percent of the more due to congestive cardiac failure.

## **Part – II : Literature related to management of congestive cardiac failure.**

**Alison While, Fiona Kiek (2009)** assessed that there are growing numbers of people with cardiac failure, which is disabling for the individuals and costly for the health services. Nurses can improve patients' well-being by promoting regular exercise and self-care. Palliative care, which includes specialist congestive cardiac failure services improves end-of-life experiences. This article reports the findings of a literature review to identify studies relating to the promotion of quality of life in chronic cardiac failure.

**Lainscak M, Farkas J. (2008)** investigated that beta blockers are underused and under prescribed in patients with chronic cardiac failure. This may be due to poor patient knowledge about their condition, pharmacological treatment and self-care management in case of deterioration. Nurse's specialist has a decisive role in implementation of evidence based management which can have effects beyond patient care.

**Susan C. Ishburn, Cynthia A. Hornberger (2008)** revealed that congestive cardiac failure is a chronic illness that poses a significant societal burden in the United States. Health care facilities are challenged to provide the most current treatment options available for patients with cardiac failure. Patient education focusing on self-management is recognized as essential. Nurses play a key role in the delivery of patient education. This article reviewed the key topics of symptom and weight management, dietary recommendations, medications, and activity are discussed.

**Nahm ES, Blum K (2008)** revealed that congestive cardiac failure(HF) is a major public health problem in the United States. With recent, rapidly advancing technologies, many studies have

examined the effects of technology-based cardiac failure management programs. Most of these studies focused on telemonitoring devices, lacking an aspect to motivate individuals to manage their own illnesses. This exploratory study is conducted to (1) examine the readiness of patients with cardiac failure in using an eHealth program that includes both telemonitoring and motivational components (ie, Web learning modules, eCommunication) and (2) assess the specific needs of patients with cardiac failure that can be addressed by a future eHealth program. The findings showed the participants' high readiness to use the proposed eHealth program if access and training are provided.

**Victoria Vaughan Dickson (2008)** stated that Congestive cardiac failure self-care is extremely challenging and few people master it. Self-care is defined as an active, cognitive process in which persons engage for the purpose of maintaining their health and managing symptoms .To examine the contribution of attitudes, self-efficacy, and cognition to cardiac failure self-care management .A self-care typology is constructed from the data: *experts*, *novices* and *inconsistent*. There are statistically significant differences ( $p$

= 0.001) in self-care practices among types and variance in attitudes, self-efficacy, and cognition. *Experts* had experience and skill in self-care, which *novices* lacked, and positive attitudes and self-efficacy that aligned with their behaviors. Most patients (71%) are classified as *inconsistent*, a self-care type associated with impaired cognition, poor physical functioning, negative attitudes, and poor self-efficacy. This typology provides insight into how expertise in self-care develops.

**Rathman, Lisa (2008)**, revealed that congestive cardiac failure is a complex and costly disease process associated with high morbidity and mortality. Implanted cardiac rhythm management devices are increasingly used in the congestive cardiac failure population to provide therapies such as protection from sudden death and cardiac resynchronization therapy. Device-based diagnostic monitoring provides clinicians with information that can assist in identifying patients at risk for congestive cardiac failure decompensation and subsequent hospitalization.

**Dansky KH, Vasey J. (2008)** stated that to determine the effects of telehomecare on hospitalization, emergency department

use, mortality, and symptoms related to sodium and fluid intake, medication use, and physical activity. The sample consists of 284 patients with congestive cardiac failure and to analyze changes in self-reported symptoms. Results show a greater reduction in symptoms for patients using telehomecare compared to control patients. The technology enables frequent monitoring of clinical indices and permits the home health care Nurses to detect changes in cardiac status and intervene when necessary.

**Stahovich M, Chillcott S. (2007)** indicated that Ventricular assist devices are becoming more commonplace in the hospital and community settings as the number of patients living with congestive cardiac failure increases. Patients being discharged after hospitalization for congestive cardiac failure rose from 399 000 in 1979 to 1 099 000 in 2006, an increase of 175%. Patients with congestive cardiac failure become severely debilitated finding activities of daily living including eating, bathing, and walking a great effort. Patients with end-stage congestive cardiac failure are often sent home on inotropic therapies and referred to hospice care. The use of VADs for these patients can dramatically improve both the quality and the length of life. VADs can be broadly

categorized as being either continuous flow (fluid dynamic) or pulsatile (volume displacement) and either can be used as short- or long-term support devices. The critical care Nurses is in a unique position to educate patients with chronic congestive cardiac failure on options available to improve their quality of life including VAD therapy. VADs are available for destination therapy for those not meeting transplant criteria, offering a longer quality of life. As centers gain more experience and referrals are made earlier in the disease process, VAD patient care will be more streamlined decreasing length of stay.

**Quinn B. (2007)** stated in his article that an overview of congestive cardiac failure and pharmacological treatment of systolic left ventricular dysfunction. The purpose of this article is to provide Nurses the knowledge of current treatment recommendations and the Five Million Lives campaign sponsored by the National Institute of Healthcare Improvement. This initiative is a national campaign to protect five million patients from medical harm by promoting evidence-based standards of practice to improve the healthcare. Congestive cardiac failure has become

part of this national initiative and the National Institute of Healthcare.

**American College of Cardiology/American Heart Association (2007)** has implemented guidelines to improve the care of Congestive cardiac failure patients. Nurses would be expected to be familiar with these guidelines, as regulatory agencies will be using these guidelines as a benchmark to evaluate the quality of care provided to patients with this diagnosis.

**American Heart Association / American College of Cardiology  
Stages of congestive cardiac failure**

Stage A
<i>Patients at high risk of developing left ventricular dysfunction because of the presence of conditions that are strongly associated with the development of congestive cardiac failure.</i>
Stage B
<i>Patients who developed structural heart disease that is strongly associated with the development of congestive cardiac failure. but who have never shown signs of congestive cardiac failure.</i>
Stage C
<i>Patients who have current or prior symptoms of congestive cardiac failure associated with underlying structural heart disease.</i>
Stage D
<i>Patients with advanced structural heart disease and</i>



***marked symptoms of congestive cardiac failure at rest despite maximal medical therapy and who require specialized interventions.***

**Source : Lewis**

**Sauls JL, Rone T.(2005)** stated that there is overwhelming evidence that beta blocker therapy in the form of metoprolol, bisoprolol, and carvedilol can have positive outcomes on morbidity, mortality, and quality of life in patients who have been diagnosed with mild to severe cardiac failure. Beta blockers should be considered a cornerstone of therapy for these patients along with ACE inhibitors and diuretics. Beta blocking drugs are effective in modifying the cascade of events that occur as a result of the neurohormonal response that leads to the devastating effects evident during cardiac failure. Long-term effects of beta blockade include an increase in cardiac output, an increase in exercise tolerance, a decrease in the number of hospitalizations, and an overall improvement in symptoms.

### **Part – III : Literature related to Nursing care on clients with congestive cardiac failure.**

**Rabelo ER, Ruschel KB. (2007)** stated that the most important objective of congestive cardiac failure treatment is to

reach and preserve patients' clinical stability. Nurses active in congestive cardiac failure clinics play a fundamental role in the educational process and continuity of patient care. The objectives of these processes are to teach, reinforce, improve and constantly evaluate patients' self-care abilities, which include weight monitoring, sodium and fluid restrictions, physical activities, regular medication use, monitoring signs and symptoms of disease worsening and early search for medical care. Therefore, education to understand congestive cardiac failure and the development of self-care abilities are considered key points to improve adherence, avoid decompensation crises and, consequently, to maintain patients clinically stable.

**Willette EW, Surrells D(2007)** revealed that congestive cardiac failure is increasing in prevalence. Patient education is essential and is included in both ambulatory and hospital performance measures used to ensure quality care. Nurses are often the primary providers of education to patients with congestive cardiac failure. This study assessed Nurses knowledge of basic principles of congestive cardiac failure self-management. The study surveyed 49 Nurses who regularly provided care to patients

with congestive cardiac failure at a hospital in the southeastern United States. Findings confirmed that Nurses are adequately prepared to educate patients with congestive cardiac failure about self-management.

**Albert NM. (2006)** indicated that there is a gap between the evidence that supports treatments used in congestive cardiac failure and day-to-day patient care. Clinical practice guidelines are evidence-based and suggest best practices. Performance measures specific to Nursing can be derived from the guidelines to guide practice and increase high-quality care. Innovative practice improvement programs, clinical leaders, and system tools are needed to close the gap. Nurses can facilitate processes that advance care planning and promote effective care delivery as part of a multidisciplinary team of healthcare providers.

**Lesperance ME. (2005)** reported that congestive cardiac failure is one of the most common diagnoses of the elderly in the United States. The Nursing literature has demonstrated that Nursing interventions aimed at effective discharge planning and appropriate self-care activities can improve outcomes for patients

hospitalized with cardiac failure. The purpose of this research is to identify, through retrospective medical record review, the discharge instruction related to self-weight monitoring provided to a sample of congestive cardiac failure patients. Results demonstrated the lack of Nursing attentiveness to teaching self-monitoring weight gain to congestive cardiac failure patients while hospitalized and the need for more comprehensive planning for appropriate discharge referrals. Suggestions are made for expanding documentation tools so that the patient or caregiver is able to carry out self-care activities at home.

**Ryder M. (2005)** indicated that since 2000 there has been a significant increase of Congestive cardiac failure Nursing positions in the Irish health service. Recognition of Nursing practice in Ireland has also transformed with the introduction of Clinical Nurses Specialist and Advance Nurses Practitioner positions. To date Clinical Nurses Specialists coordinate and manage congestive cardiac failure programmes, Advanced Nurses Practitioner is a new position in Irish Nursing from examining guidelines and education this may be the way forward for Congestive cardiac failure Nursing in Ireland.

**Hamner JB. (2005)** stated that healthcare providers who gave emotional support and teach self-care to patients with congestive cardiac failure has evolved substantially in recent years. The purpose of this article is to provide a systematic evaluation of the impact of post hospital Nursing interventions in the management of cardiac failure. Four models of Nursing interventions emerged: home-based Nursing interventions, multidisciplinary interventions, congestive cardiac failure clinics, and telephone- or technology-based Nursing interventions. On the basis of currently available data, post hospital Nursing interventions in congestive cardiac improve clinical outcomes and decrease healthcare costs and resource use.

**Deaton C, Grady KL. (2004)** viewed that the prevalence of congestive cardiac failure is increasing because of the increasing life expectancy of the population and improved survival from cardiovascular disease. This article synthesizes the state of the science of Nurses sensitive outcomes in congestive cardiac failure treated medically or surgically and provides recommendations for building the science. Outcomes studied include mortality,

morbidity, resource use, quality of life, symptoms, physical function, return to work, and self-care and compliance behavior.

#### **Part – IV : Literature related to Nutrition**

**Grossniklaus DA (2008)** reported that the patients are thought to be malnourished, and macronutrient and micronutrient deficiencies may potentially aggravate cardiac failure symptoms. Thus, concerns have been raised about the overall nutrient composition of diets in cardiac failure populations. The purpose of this study is to examine the macronutrient and micronutrient intake by caloric adequacy among community-dwelling adults with Cardiac Failure. Interventions aimed at increasing overall intake and nutrient density are suggested.

**Indian Express 2007** revealed that said that ginger might prevent heart attacks. If we are habituated to fatty food makes sure supplement daily diet with above five grams of ginger to protect against heart disease.

**Dr.M. Swaminathan 2005** stated that a majority of congestive cardiac failure are due to coronary atheroma and

atherosclerosis. Atheroma and atherosclerosis are used to denote conditions in which lipid is deposited in the intima of the blood vessels. The important contributory causes for the development of atherosclerosis are high cholesterol intake, sedentary life, stress and strain. The pattern of diet and the daily menu for an adult suffering from congestive cardiac failure is given below

### **THERAPEUTIC DIETS**

#### **Daily menu for congestive cardiac failure**

<b>VEGETARIAN</b>	<b>NON-VEGETARIAN</b>
<b>Morning</b>	
Weak tea	Weak tea
<b>Breakfast</b>	
Corn flakes with skim milk or bread or idli-1 serving	Corn flakes with skim milk or bread or idli-1 serving.
Cheese -2 slices	Cheese- 2 slices
Fruits -1 serving	Fruits- 1 serving
Weak tea -1cup	Weak tea-1cup
<b>Lunch</b>	
Cooked rice or chappati-1 serving	Cooked rice or chappati-1 serving
Dhal soup – 1 cup	Mutton soup- 1cup
Cooked vegetables- 1 serving	Mutton or fish curry- 1 serving
Cheese -2 slices	Curds- 1 cup
Curds- 2 cups	
Fruits- 1 serving	Fruits- 1 serving
Skim milk pudding- half cup	Skim milk pudding- half cup
<b>Tea</b>	
Biscuits- 2	Biscuits- 2
Fruits- 1 serving	Fruits- 1 serving
Weak tea- 1 cup	Weak tea- 1 cup
<b>Dinner</b>	
Similar to Lunch	

**Source : Handbook of food and nutrition, Dr.Swaminathan**

**AMJ. Clinator (2005)** stated that women who eat a serving of whole grain each day have one third less risk of death from heart disease than women who already eat whole grains.

**Health by Nutrition (2004)** revealed that small amount of fish may be sufficient to provide on essential amount of long chain n-3 poly unsaturated fatty and or some unidentified nutrient or both that decrease sudden cardiac death.

#### **Part – V : Literature related to exercise**

**Tai MK (2008)** stated that exercise has gradually become accepted as an intervention beneficial to patients with HF. About 69 trials are reviewed, which used as main outcome measures: (a) central hemodynamic parameters, (b) peripheral blood flow, (c) endothelial function, (d) activation of neurohormones and cytokine systems, (e) structure of and metabolism in skeletal muscles, and/or (f) quality of life. Study findings suggest that the favorable physiological responses to exercise might slow some of the pathophysiological progression of HF.



**Appleton B. (2004)** reported that the National Institute for Clinical Excellence has recommended that exercise training be offered to patients with chronic congestive cardiac failure. This recommendation is supported by research-based evidence from a variety of studies over the past 10 years. Initially, the studies are concerned primarily with the safety and effectiveness of exercise in these high-risk patients, but more recent studies have begun to investigate the most appropriate methods of exercise for this patient population. This article presents a systematic review of the literature relating to exercise training. It then attempts to identify, in light of the evidence, the most effective programme of exercise, including type, duration and degree of exercise.

## **CHAPTER - III**

### **METHODOLOGY**

This chapter deals with methodology adopted for the study and includes the description of research design, setting of the study population, sample size, sampling technique, method of sample selection, description of tool for data collection.

#### **RESEARCH DESIGN**

Evaluative case study design. This method was used to evaluate the effectiveness of Nursing care by assessing the client's condition and their needs and problems were assessed and Nursing intervention is provided. Evaluative case study had helped to evaluate the specific needs of the clients with congestive cardiac failure.

#### **SETTING OF THE STUDY**

The study was conducted in Intensive Care Unit at Melmaruvathur Adhiparasakthi Institute of Medical Sciences and Research, Melmaruvathur, Kancheepuram District.

## **POPULATION**

The population of the study comprised of all clients with congestive cardiac failure, who were admitted in Intensive Care Unit at Melmaruvathur Adhiparasakthi Institute of Medical Sciences and Research, Melmaruvathur, Kancheepuram District.

## **SAMPLE SIZE**

The sample size includes 30 clients who fulfilled the inclusion criteria.

## **SAMPLING TECHNIQUES**

Sampling techniques used by the investigator was convenient sampling method. The convenient sampling technique was used to select the clients with congestive cardiac failure and data was collected from the Intensive Care Unit at Melmaruvathur Adhiparasakthi Institute of Medical Sciences and Research, Melmaruvathur, Kancheepuram District.

## **CRITERIA FOR SAMPLE SELECTION**

### **Inclusion Criteria**

- Both male and female clients with congestive cardiac failure.
- The clients who were admitted in Intensive Care Unit.
- The sample comprised either literate or illiterate.
- The samples who could communicate in English or Tamil.

### **Exclusion Criteria**

- Clients who belong to the age below 30 years.
- Clients who were seriously ill.

## **Instruments and Tools for Data Collection**

### **Section A**

This section consists of information about demographic variables such as age group, sex, religion, educational status, occupation, marital status, family income per month, personal habits, dietary pattern, co-morbid disease, source of information.

### **Section B**

In this section an observational checklist was used to monitor the general condition of the clients with congestive cardiac failure.

It includes details such as vital parameters, dyspnea, skin changes, assessment of edema and ascitis.

### **Section C**

In this section an structured assessment rating scale was used to monitor the general condition of the client with congestive cardiac failure. It includes details such as fatigue, dyspnea, tachycardia, assessment of edema scale, skin changes, chest pain, weight monitoring, behavioural changes and ascitis.

### **Section D**

This section focused on Nursing care which were provided to clients with congestive cardiac failure. This part consisting of Nursing intervention such as monitoring vital signs, improving gas exchange, cardiac function, proper positioning, administration of medications, dietary management, reducing anxiety and health promotion.

## **CHAPTER – IV**

### **DATA ANALYSIS AND INTERPRETATION**

This chapter deals with description of tool, validity, report of pilot study, reliability, informed consent, data collection procedure, score interpretation and method of data analysis plan.

#### **DESCRIPTION OF THE TOOL**

The structured tool was developed based on the objectives of the study and also based on research experts concerns, review of literature. The instrument consists of three parts, they are

#### **SECTION - A**

Demographic variables includes age group in years, sex, religion, educational status, occupation, marital status, family income per month, personal habits, type of dietary pattern, co morbid disease, source of information. They were collected by interviewing the client and based upon their answers, a tick mark (✓) was put to the appropriate response of each item.

## **SECTION - B**

Observation checklists include temperature, pulse, respiration blood pressure, dyspnea, skin, edema and ascitis. They were collected by assessing the client and based upon their response to appropriate Nursing intervention.

## **SECTION - C**

Effectiveness of Nursing care was assessed through structured assessment rating scale. The maximum score was three. The minimum score was one.

## **VALIDITY**

The tool was prepared by the investigator under the guidance of experts and on the basis of objectives, which were assessed and evaluated, accepted by experts of research committee. Content validity of this instrument was obtained from Nursing experts.

## **REPORT OF THE PILOT STUDY**

The pilot study was conducted to find out the effectiveness of Nursing care on clients with congestive cardiac failure admitted in

Adhiparasakthi Institute of Medical Sciences and Research, Melmaruvathur for a period of ten days. The tools were prepared by the investigator and it was used in pilot study to find out the reliability and validity which were evaluated by the experts of the Research Committee. The investigator used convenient sampling technique to select three samples and by using checklist and structured assessment scale, the health condition of the patient with congestive cardiac failure was assessed. Nursing care was provided as per the tool and health status was evaluated and results were analyzed based on the score. Therefore the nursing care was highly effective on clients with congestive cardiac failure.

## **RELIABILITY**

The reliability of the tool was measured by using inter rater method. The reliability score was  $r = 0.81$ . Reliability and practicability of tool was tested through the pilot study and used for main study.

## **INFORMED CONSENT**

The investigator obtained permission from the research committee and from the institution. Written consent was taken from



study participants to conduct the study. The data collection was done by using interview and observational method.

## DATA COLLECTION PROCEDURE

Data collection procedure was done by using structured assessment rating scale and Nursing assessment protocol and recorded. The investigator obtained consent from the client to participate in the study.

## SCORING INTERPRETATION

The score were interpreted as follows.

$$\text{Scoring interpretation} = \frac{\text{Obtained score}}{\text{Total score}} \times 100$$

**Table 4.1**

Description	Score	Percentage
Mild	$\leq 9$	<50%
Moderate	10-18	50%-75%
Severe	19-27	>75%

## **DATA ANALYSIS PLAN**

The data analysis was done by using descriptive and inferential statistics according to the need. The items were scored after assessment and evaluation and the results were tabulated. The statistical methods used for analysis were frequency, percentage, mean, standard deviation, sign test, correlation coefficient.

## **DATA ANALYSIS TECHNIQUE**

The descriptive analysis method was used to find out mean of score, standard deviation of score and percentage of score. The sign test and correlation coefficient was adopted and interpreted in each and every score and found the results of effectiveness of Nursing care on clients with congestive cardiac failure.

**Table 4.2**

**STATISTICAL METHOD**

<b>S.No</b>	<b>Data analysis</b>	<b>Method</b>	<b>Remarks</b>
1.	Descriptive statistics	Frequency and percentage, mean and standard deviation	To describe the demographic variables of clients with congestive cardiac failure
2.	Inferential statistics	1. sign test  2. Karl pearson correlation coefficient	Analyzing the effectiveness between pre assessment and post assessment of selective Nursing care  To analyse the correlation between demographic variables and effectiveness of selective Nursing interventions.

## **DATA ANALYSIS AND INTERPRETATIONS**

Analysis is the categorization of obtained score to research tool. Researcher analysed and interpreted under the following Sections

- Section A** - Frequency and percentage distribution of demographic variables of the clients with congestive cardiac failure.
- Section B** - Frequency and percentage distribution of assessment score and evaluation score on clients with congestive cardiac failure
- Section C** - Mean and standard deviation of assessment and evaluation score on client with congestive cardiac failure
- Section D** - Improvement score mean and standard deviation of assessment and evaluation score and effectiveness of Nursing care on clients with congestive cardiac failure
- Section E** - Association between demographic variables and effectiveness of Nursing care on client with congestive cardiac failure

## SECTION-A

### DISTRIBUTION OF DEMOGRAPHIC VARIABLES ON CLIENTS WITH CONGESTIVE CARDIAC FAILURE

TABLE 4.3

S. No.	Demographic Data	No	Percentage
1.	<b>Age group in years</b>		
	a) 31 – 40	2	6.7
	b) 41 – 50	5	16.7
	c) 51 – 60	10	33.3
	d) above 61 years	13	43.3
2.	<b>Sex</b>		
	a) Male	22	73.3
	b) Female	8	26.7
3.	<b>Religion</b>		
	a) Hindu	24	80.0
	b) Muslim	3	10.0
	c) Christian	3	10.0
4.	<b>Educational Status</b>		
	a) Illiterate	8	26.7
	b) Primary level	10	33.3
	c) High school level	9	30.0
	d) Graduate and Post graduate	3	10.0
5.	<b>Occupation</b>		
	a) Employed	8	26.7
	b) Agriculture	10	33.3
	c) Business	4	13.3
	d) Home maker	8	26.7

<b>6.</b>	<b>Marital Status</b> a) Married b) Widow / Widower c) Divorced	20 5 5	66.6 16.7 16.7
<b>7.</b>	<b>Family Income per month</b> a) upto Rs.2000 b) Rs.2001 – 3000 c) Rs.3001 – 4000 d) Above Rs.4000	9 10 6 5	30.0 33.3 20.0 16.7
<b>8.</b>	<b>Personal habits</b> a) Tobacco chewing b) Smoking and Tobacco chewing c) Smoking and Alcoholism d) Nil	8 10 8 4	26.7 33.3 26.7 13.3
<b>9.</b>	<b>Type of dietary pattern</b> a) Vegetarian b) Non vegetarian	5 25	16.7 83.3
<b>10.</b>	<b>Co-Morbid disease</b> a) Hypertension b) Diabetes Mellitus c) Ischemic heart disease d) Nil	10 10 5 5	33.3 33.3 16.7 16.7
<b>11.</b>	<b>Source of Information</b> a) Health personnel b) Relatives and friends c) Mass media d) Others	11 10 5 4	36.7 33.3 16.7 13.3

Table 4.3 shows the distribution of demographic variables of clients with congestive cardiac failure. The table shows that among 30 samples, Age group in years above 61 years, 13(43.3 percent), 51- 60 years, 10 (33.3 percent), 41-50 years, Five (16.7 percent). 31-40 years Two (6.7 percent) about sex male 22 (73.3 percent), female Eight (26.7 percent).

Regarding religion, Hindu 24 (80 percent), Muslim Three (10 percent), Christian Three (10 percent). Regarding educational status primary 10(33.3 percent), High school level Nine (30.0 percent), illiterate Eight (26.7 percent), graduate and post graduate three (10.0 percent). About occupation, agriculture 10(33.3 percent), employed Eight (26.7 percent), house wife/home maker Eight (26.7 percent), business Four (13.3 percent).

About marital status married 20(66.6 percent), widow /widower Five (16.7 percent), divorced Five (16.7). Regarding family income per month Rs.2001-3000 10(33.3 percent), up to Rs.2000 Nine (30.0 percent), Rs.3001-4000 6(20.0 percent), above Rs.4000 Five (16.7 percent). About personal habits Smoking and Tobacco chewing 10 (33.3 percent), Smoking and

Alcoholism Eight (26.7 percent), Tobacco chewing Eight (26.7 percent), and without any personal habits Four (13.3 percent).

Type of dietary pattern non-vegetarian 25 (83.3 percent) vegetarian Five (16.7 percent), .About co-morbid disease, hypertension 10(33.3 percent), diabetes mellitus 10(33.3 percent), ischemic heart disease Five (16.7 percent), nil Five(16.7 percent). About source of information health personnel 11(36.7 percent), relatives and friends 10(33.3 percent), mass media Five (16.7 percent), others Four (13.3 percent).



**SECTION-B**

**FREQUENCY AND PERCENTAGE DISTRIBUTION OF  
ASSESSMENT SCORE AND EVALUATION SCORE OF  
CLIENTS WITH CONGESTIVE CARDIAC FAILURE**

**Table 4.4**

HEALTH STATUS	Assessment		Evaluation	
	No.	%	No.	%
Mild Health Deterioration > 50%	0	0	24	80
Moderate Health Deterioration 50% - 75%	7	23	6	20
Severe Health Deterioration > 75%	23	77	0	0
<b>Total</b>	<b>30</b>	<b>100</b>	<b>30</b>	<b>100</b>

Table 4.4 shows that in assessment among 30 clients 23 (77 percent) clients had severe health deterioration and seven (23 percent) clients had moderate health deterioration and in evaluation six (20 percent) clients were in moderate health deterioration and 24 (80 percent) clients were in mild health deterioration.

## SECTION-C

### MEAN AND STANDARD DEVIATION OF ASSESSMENT AND EVALUATION SCORE OF CLIENT WITH CONGESTIVE CARDIAC FAILURE

**Table 4.5**

S.No.	HEALTH STATUS	MEAN	S.D	C.I.
1.	Pre test	21.7	2.51	20.9 - 22.5
2.	Post test	12.6	2.11	11.7 – 13.4

Table 4.5 shows comparison between mean and standard deviation of assessment and evaluation on clients with congestive cardiac failure. This table shows that during the assessment, the mean was 21.7 with the standard deviation of 2.51 and on evaluation the mean 12.6 was with the standard deviation of 2.11.

The conclusion about the above table reveals that the assessment mean score was reduced in evaluation level.

## SECTION – D

### IMPROVEMENT SCORE MEAN AND STANDARD DEVIATION OF ASSESSMENT AND EVALUATION SCORE AND EFFECTIVENESS OF NURSING CARE OF CLIENTS WITH CONGESTIVE CARDIAC FAILURE

Table 4.6

S. NO	HEALTH STATUS	MEAN	S.D	K Value	Sign Value	C.I.
1.	Improvement score	7.7	2.25	9.14	5	20.9 – 22.5
						11.7 – 13.4

Table 4.6 shows the mean and standard deviation of improvement score for effectiveness of Nursing care on clients with congestive cardiac failure. The table also reveals the assessment of health status by the value of mean, standard deviation and sign value of improvement score. The improvement score of mean value is 7.7 and standard deviation is 2.25 and the sign value is 5 . The sign value was compared with tabulated value and  $s < k$  at  $P < 0.01$ . So it is concluded that the Nursing care was highly effective in congestive cardiac failure clients.

## SECTION - E

### ASSOCIATION BETWEEN DEMOGRAPHIC VARIABLES AND EFFECTIVENESS OF NURSING CARE OF CLIENT WITH CONGESTIVE CARDIAC FAILURE

Sl. No.	Demographic variables	Assessment				Evaluation				
		>75% Poor		51%- 75% Fair		51%- 75% Fair		< 50% Good		r
		No.	%	No.	%	No.	%	No.	%	
1.	<b>Age group in years</b>									
	a) 31 – 40	2	6.6	0	0	2	6.6	0	0	0.99*
	b) 41 – 50	5	16.7	0	0	3	10	2	6.6	
	c) 51 – 60	5	16.7	5	16.7	3	10	7	23.4	
	d) above 61 years	11	36.7	2	6.6	7	23.4	6	20	
2.	<b>Sex</b>									
	a) Male	16	53.3	6	20	11	36.7	11	36.7	0.89*
	b) Female	7	23.4	1	3.3	4	13.3	4	13.3	
3.	<b>Religion</b>									
	a) Hindu	18	60	6	20	13	43.3	4	13.3	0.87*
	b) Muslim	2	6.6	1	3.3	1	3.3	2	6.6	
	c) Christian	3	10	0	0	1	3.3	2	6.6	
4.	<b>Educational Status</b>									
	a) Illiterate	7	23.3	1	3.3	5	16.6	3	10	0.21
	b) Primary level	9	30	1	3.3	6	20	4	13.3	
	c) High school level	5	16.6	4	13.3	3	10	6	20	
	d) Graduate and Post graduate	2	6.6	1	3.3	1	3.3	2	6.6	
5.	<b>Occupation</b>									
	a) Employed	6	20	2	6.6	4	13.3	4	13.3	0.31
	b) Agriculture	8	26.6	2	6.6	6	20	4	13.3	
	c) Business	2	6.6	2	6.6	1	3.3	3	10	
	d) Home maker	7	23.3	1	3.3	4	13.3	4	13.3	

Sl. NO.	Demographic variables	Assessment				Evaluation				
		>75% Poor		51%-75% Fair		51%-75% Fair		< 50% Good		r
		No.	%	No.	%	No.	%	No.	%	
6.	<b>Marital Status</b>									
	a) Married	17	56.6	3	10	12	40	8	26.6	0.87*
	b) Widow / Widower	3	10	2	6.6	2	6.6	3	10	
	c) Divorced	3	10	2	6.6	1	3.3	4	13.3	
7.	<b>Family Income per month</b>									
	a) upto Rs.2000	5	16.6	4	13.3	4	13.3	5	16.6	0.87*
	b) Rs.2001 – 3000	9	30	1	3.3	6	20	4	13.3	
	c) Rs.3001 – 4000	5	16.6	1	3.3	3	10	3	10	
	d) Above Rs.4000	4	13.3	1	3.3	2	6.6	3	10	
8.	<b>Personal habits</b>									
	a) Tobacco chewing	6	20	2	6.7	4	13.3	4	13.3	0.98*
	b) Smoking and Tobacco chewing	8	26.6	2	6.7	6	20	4	13.3	
	c) Smoking and Alcoholism	2	6.7	2	6.7	1	3.3	3	10	
	d) Nil	7	23.3	1	3.3	4	13.3	4	13.3	
9.	<b>Type of dietary pattern</b>									
	a) Vegetarian	4	13.3	1	3.3	3	10	2	6.6	0.99*
	b) Non vegetarian	19	63.3	6	20	12	40	13	43.3	
10.	<b>Co-Morbid disease</b>									
	a) Hypertension	8	26.6	2	6.6	4	13.3	6	20	0.27
	b) Diabetes Mellitus	6	20	4	13.3	5	16.6	5	16.6	
	c) Ischemic heart disease	4	13.3	1	3.3	3	10	2	6.6	
	d) Nil	5	16.6	0	0	3	10	2	6.6	
11.	<b>Source of Information</b>									
	a) Health personnel	11	36.6	0	0	6	20	5	16.6	0.87
	b) Relatives and friends	6	20	4	13.3	4	13.3	6	20	
	c) Mass media	4	13.3	1	3.3	3	10	2	6.6	
	d) Others	2	6.6	2	6.6	2	6.6	2	6.6	

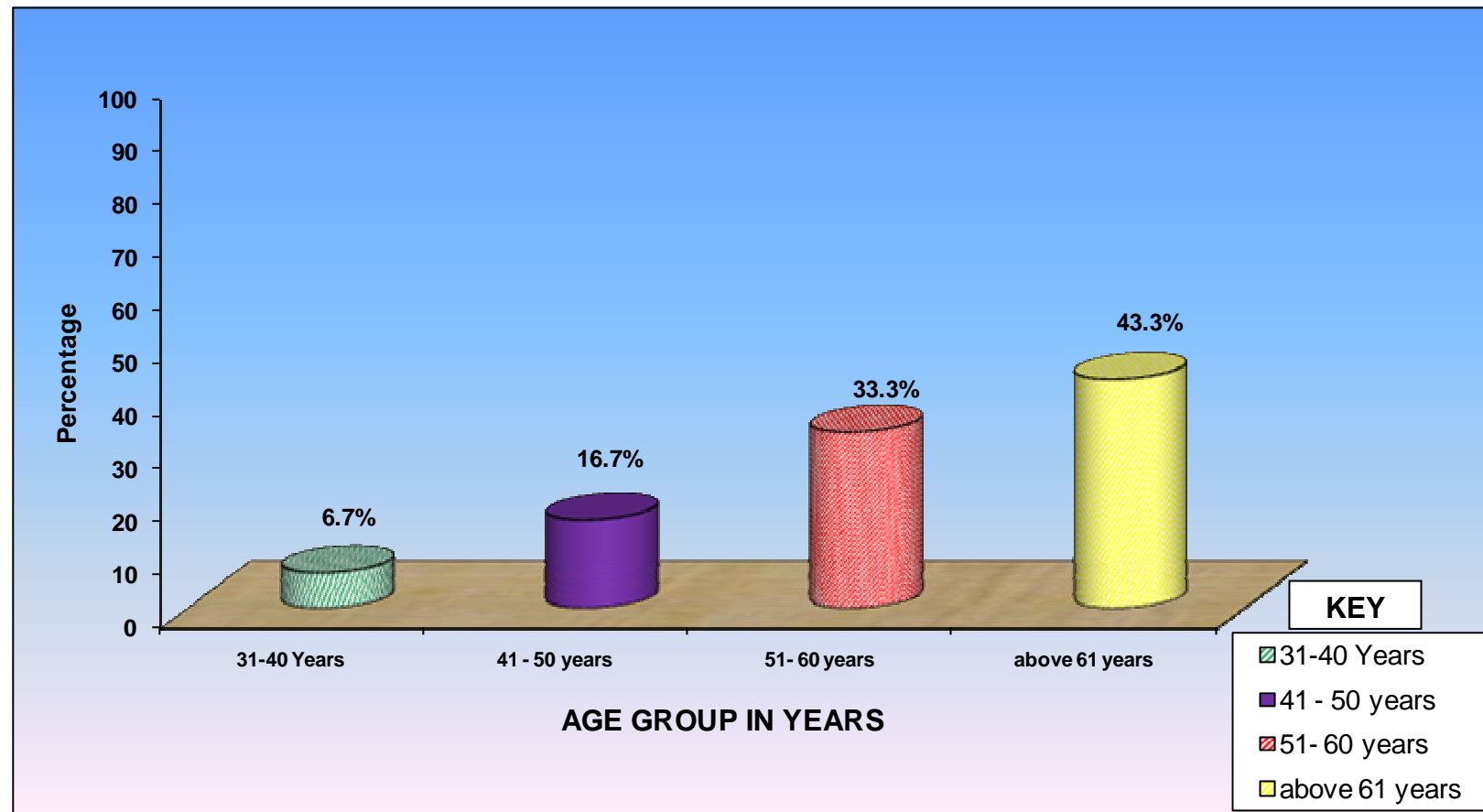
\* significant at  $p < 0.001$

On comparing the health status evaluation score with the demographic variables the above table shows that there is correlation between the assessment and evaluation score and the demographic variable of clients with congestive cardiac failure.

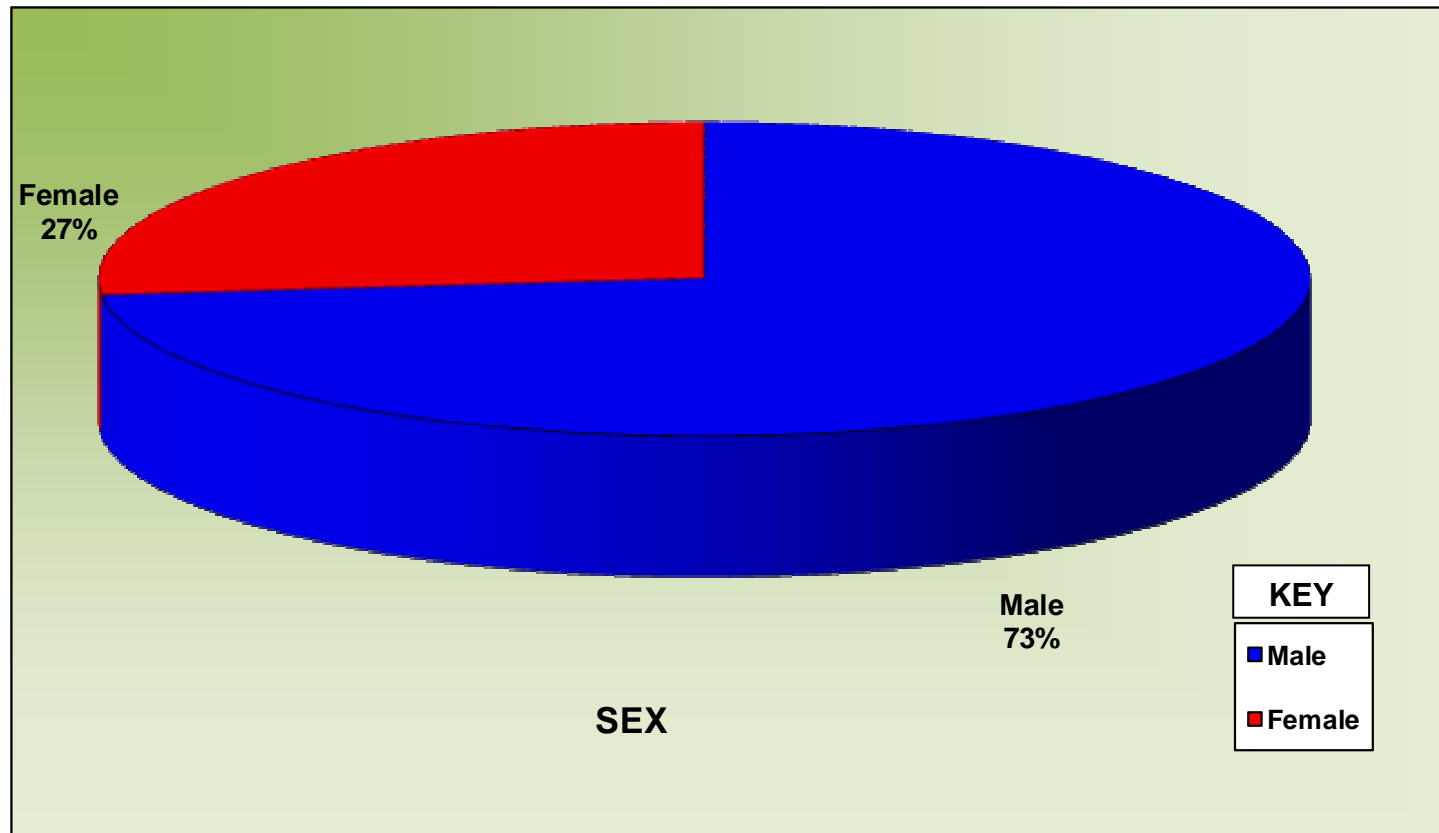
## **PRESENTATION OF FINDINGS**

The study findings showed that the assessment mean was 21.7 with standard deviation of 2.51 and evaluation mean of 12.6 with standard deviation 2.11. The improvement mean was 7.7, with standard deviation of 2.25 sign value was 5 which showed that the Nursing care was highly significant at  $P < 0.01$  level.

In the end of the study the client showed improvement in cardiac function, reduced discomfort, improvement in respiratory status, improvement in fluid and electrolyte balance, maintained good nutritional status and improved knowledge about risk factors, signs and symptoms and prevention of complication of congestive cardiac failure.

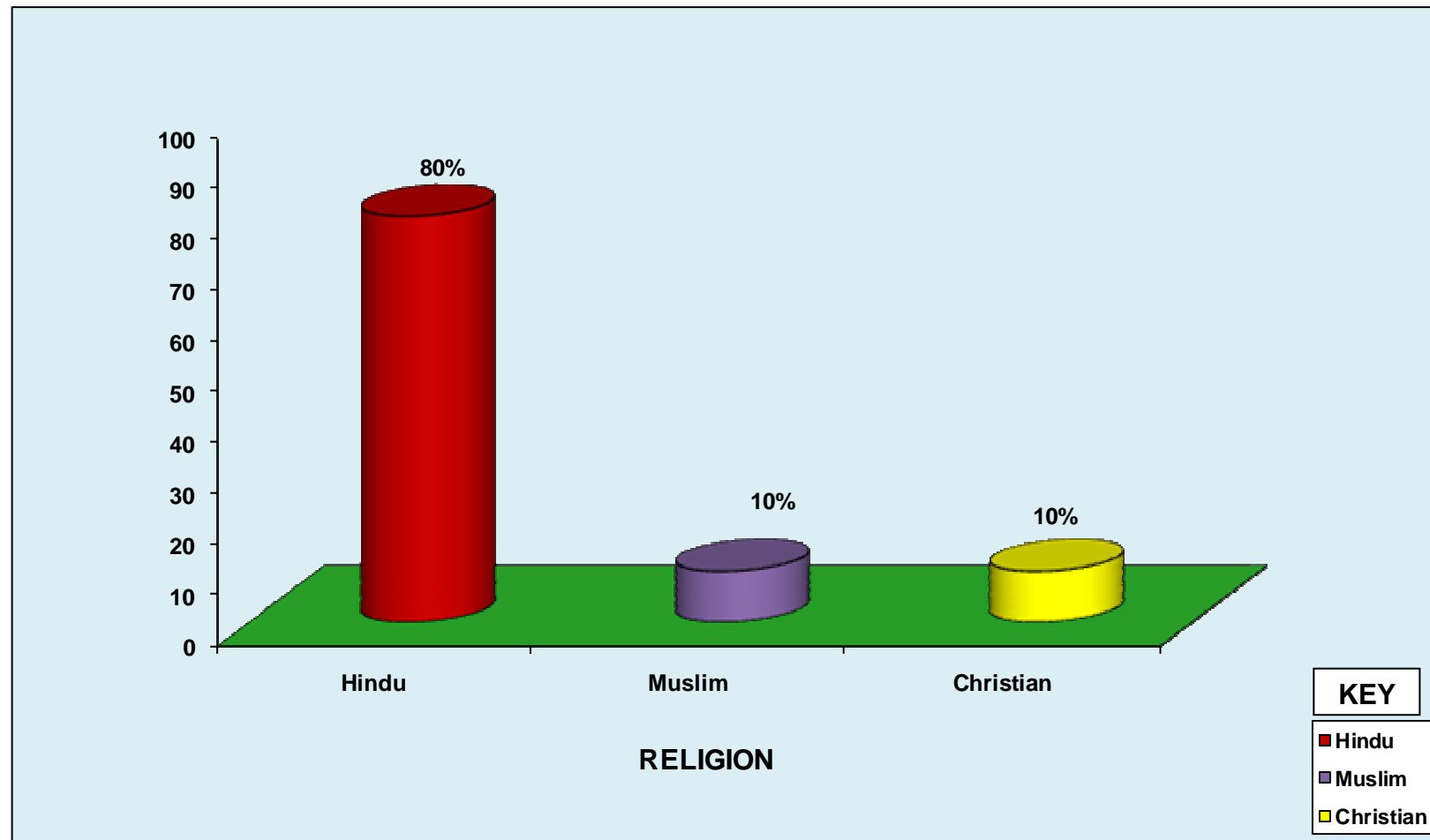


**Fig.4.1 PERCENTAGE DISTRIBUTION OF CLIENTS BASED ON AGE GROUP IN YEARS**

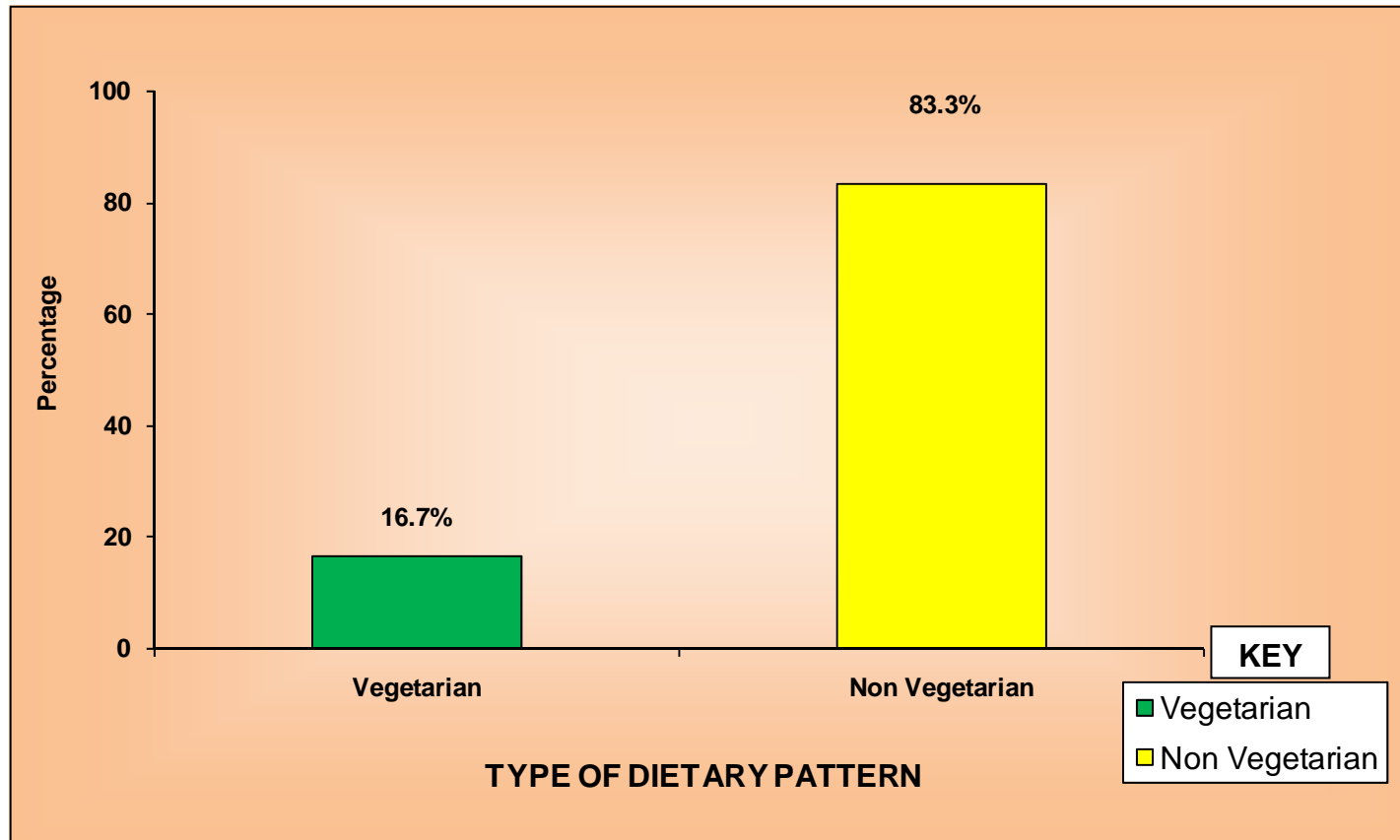


**Fig.4.2 PERCENTAGE DISTRIBUTION OF CLIENTS BASED ON SEX**

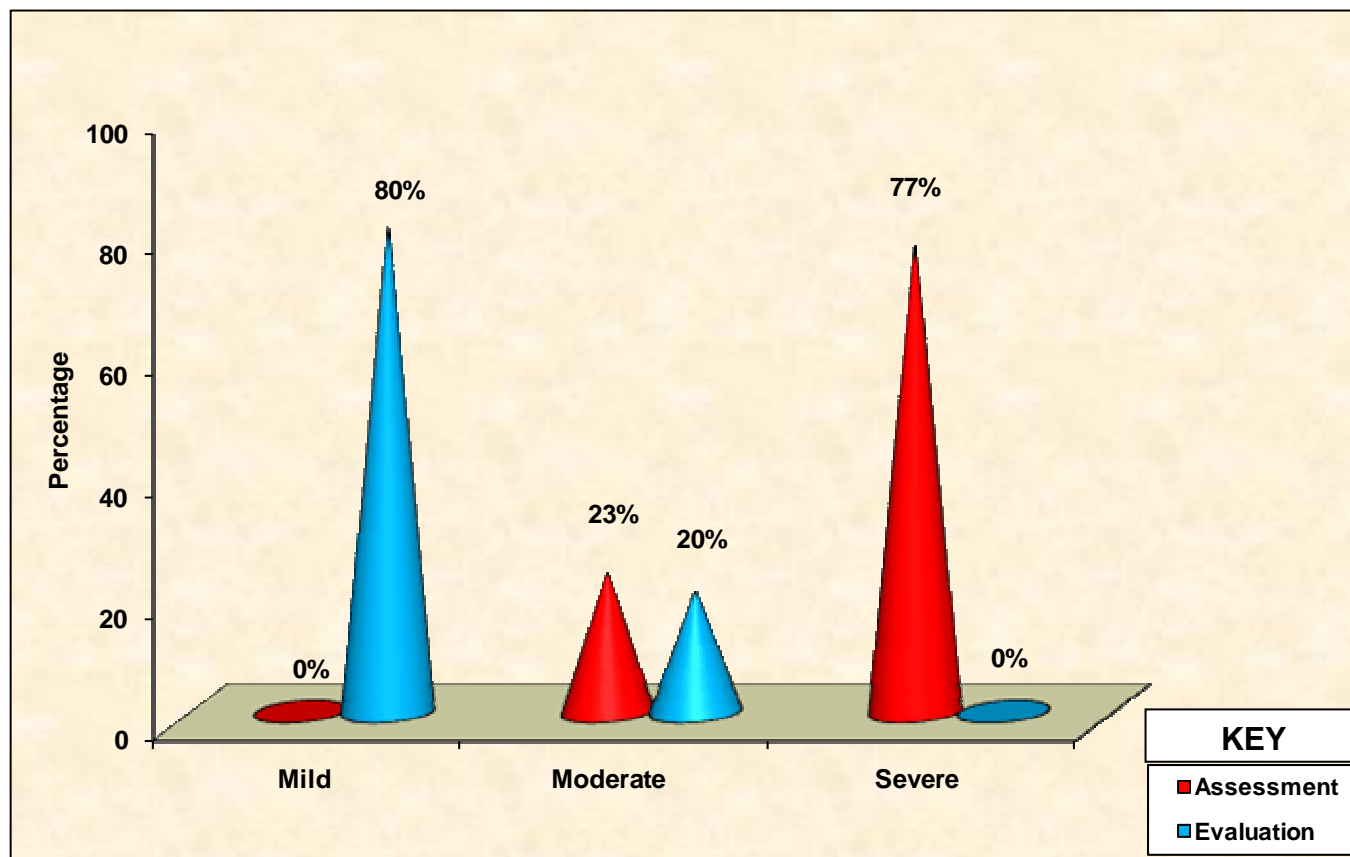




**Fig 4.3 PERCENTAGE DISTRIBUTION OF CLIENTS BASED ON RELIGION**



**Fig.4.4 PERCENTAGE DISTRIBUTION OF CLIENTS BASED ON  
TYPE OF DIETARY PATTERN**



**Fig.4.5 PERCENTAGE DISTRIBUTION OF HEALTH STATUS OF ASSESSMENT AND EVALUATION SCORE ON CLIENTS WITH CONGESTIVE CARDIAC FAILURE**

## **CHAPTER- V**

### **RESULT AND DISCUSSION**

The aim of the present study is to evaluate the effectiveness of Nursing care on clients with congestive cardiac failure. A total number of 30 samples were selected for the study on admission, assessment was done by using structured assessment tool. After Nursing care, at the time of discharge or after seven days the evaluation was done by using the same structured assessment tool. The results of the study have been discussed according to the objectives of the study. Conceptual frame work and related literature.

**First objective was to assess the health status of the clients with congestive cardiac failure.**

The study was conducted in intensive care unit of Melmaruvathur Adhiparasakthi Institute of Medical Sciences and Research. Thirty clients with Congestive cardiac failure who met the inclusion criteria were selected for the study. Each client demographic variables, vital parameters and nursing care were

assessed by structured assessment tool prepared by the investigator.

In assessment 23(77 percent) were in severe health deterioration and seven (23 percent) clients were in moderate health deterioration with mean of 21.7 and standard deviation 2.51.

**The second objective was to evaluate the effectiveness of Nursing care on clients with congestive cardiac failure.**

The Nursing care as per the protocol provided to each client was observed by using structured assessment rating scale prepared by the investigator. Comparison of assessment mean level of 21.7 and evaluation mean of 12.6 showed the improvement score mean was 7.7 with standard deviation of 2.25, the sign value was Five proved the difference in health status between before and after the Nursing care. Therefore the nursing care was highly effective on clients with congestive cardiac failure.

**Third objective to findout co-relation between the selected demographic variables with health status assessment and evaluation score on clients with congestive cardiac failure.**

The co-relation proved that there is significant co-relation between the selected demographic variables such as age in years, sex, religion, marital status, family income, personal habits and effectiveness of Nursing care and improvement of health status of clients with Congestive cardiac failure.

The overall findings of the study showed that the Nursing care was very effective improving in terms of clients, normal vital parameters, cardiac function, fluid and electrolyte balance, free from complications, improving gas exchange and coping abilities of clients and family members.

## **CHAPTER – VI**

### **SUMMARY AND RECOMMENDATION**

The present study is conducted to elicit the effectiveness of Nursing care on client with congestive cardiac failure. A total of 30 clients with congestive cardiac failure who met the inclusion criteria were selected from the intensive care unit in Melmaruvathur Adhiparasakthi Institute of Medical Sciences and Research, Melmaruvathur by using convenient sampling technique.

The pilot study was conducted at Melmaruvathur Adhiparasakthi Institute of Medical Sciences and Research, Melmaruvathur for a period of two weeks. The tool was prepared by the investigator under the guidance of experts and on the basics of objectives which were assessed and evaluated, accepted by experts of research committee and which was used for the main study.

The objective of this research was to assess the health status of clients with congestive cardiac failure, to evaluate the

effectiveness of Nursing care on clients with Congestive cardiac failure and to find out co-relation between demographic variables with health status improvement.

The investigator first introduced herself to the client and developed a good rapport with them. After the selection of samples assessment was conducted and Nursing care was given from the admission to till discharge of clients with congestive cardiac failure.

## **CONCLUSION**

Assessment out of 30 samples 90 percent of patients had dyspnea, poor health condition, impaired fluid and electrolyte balance, tachycardia, ineffective, breathing pattern, edema and impaired mobility while majority of the patients were male, belong to the age group of 51-60 years.

In evaluation of Nursing care, the clients were maintained normal breathing pattern, improvement in fluid and electrolyte balance, improvement in health status, free from complications, improving coping, abilities of client and family members.



There is statistically ( $p < 0.05$ ) significant improvement in health status of clients with Congestive Cardiac failure. In relation to effectiveness of Nursing care, there is markedly maintained health status after Nursing care of clients with Congestive Cardiac failure.

### **Nursing implications**

The principle role of Nurses was to provide care and comfort as they carried out specific Nursing functions. However changes in Nursing have expanded the role to include increased emphasis on health promotion and illness prevention, as well as concern for the client as a whole.

The planned Nursing interventions were scheduled in the clinical setup in the fixed data with time for the clients as well as to the family members.

Direct care interventions treatments were performed through interaction with clients. Nursing interventions provides a standard of care or clinical guide line which could still be individualized for

specific clients depending on how an institution could recommend protocol implementation.

The research implies that the Nurses should help the patient to regain health. Although treatment skills that promote physical health which are important to care givers, it implies the need for change that has to be introduced by the Nursing professionals.

The implication of the research can be seen in areas of Nursing practice, Nursing education, Nursing administration and Nursing research.

### **Implications for Nursing practice**

In coronary care unit, this research will provide insight among the Nurses to detect certain problems like dyspnea, fatigue, tachycardia pulmonary edema and cardiogenic shock through careful assessment which will guide them to detect life support measures appropriately to prevent further complication in order to save the life of patients with Congestive Cardiac failure. It also meets the challenges among Nurses for growing autonomy in decision making capacity to render priority based care to the

patients at a given moment. The research protocol can apply the knowledge while rendering care to the patients in collaborative manner. The protocol also provides a standard of care or clinical guideline which can still be individualized for a specific client depending on how an institution recommends protocol implementation.

The research implies the Nurses helps the client to regain health. Although the treatment skills that promote physical health are important to care givers psychological aspect of care also important for the patients. It implies the need for change that has to be introduced by the Nursing professionals.

### **Implications for Nursing education**

Co-relation of theory and practice is a vital needs and it is important to Nursing education. This research will emphasize among learners to develop observational skills and develop systematic assessment which help them to detect the problem and motivate them to render care to the patients at acute stage Nurse who are working in coronary care unit are expected to have thorough knowledge in management of patients with congestive

cardiac failure. By early detection and identification of existing problem needs quick assessment skills. Nursing students have to assess the Congestive cardiac failure patient's problems and to provide effective experience based care.

Nurse educators when plan to instruct the students, should provide adequate opportunity develop skills in handling of clients with Congestive cardiac failure and should demonstrate how to tackle such patients in community and clinical settings.

The research calls for strengthening the clients Nursing care in the present research of the Nursing education. The research findings suggest that the content of subject should include the views of clients with Congestive cardiac failure and its management and prevention of complications.

### **Implications on Nursing Administration.**

The Nurse administrator manages the client care and the delivery of specific Nursing services within the health care agency. The Nurse leaders in Nursing are confronted to undertake the health needs of the most vulnerable effective organization and

management. The Nurse administrator should take active part in health policy making, developing protocol, procedures and standing orders related to clients education.

The Nurse administration should give attention on the proper selection, placement and effective utilization of the Nurse in all areas with in the available resources giving importance for their creativity, interest, ability in education of the clients to provide care to the patients.

The Nurse administrator on educative role of the Nurse is adequate supervision of Nursing services and provides adequate in service education programs on newer management strategies in Congestive cardiac failure and handling of advanced technologies would motivate Nurse to carry out Nursing interventions and improve the standard of Nursing care.

Nurse executives often have responsibilities for all clinical functions within the hospital. This may include all ancillary personnel who provide and support patient care services. The

Nursing administrators need more skills in management, as well as understand all aspects of Nursing and client care.

### **Implication for the Nursing research**

Nursing today is involved every issues in critical care unit due to changes in health care delivery systems, advancement of technology, example monitor, ventilator infusion devices etc, development of new discipline in medicine, Nursing need to be developed, to research in specific areas of problems encountered by the patients with Congestive Cardiac failure. This research directs the Nursing personnel to broaden their horizons, knowledge and skills to elicit problems and to conduct many more research to raise their power to implement prompt care activities.

This research will imply the Nurse educator to conduct and motivate learner to select a relevant research with all dissemination namely physical, emotional, mental, social and spiritual changes encountered by patients with Congestive cardiac failure at coronary care unit-utilization of findings and derivation of knowledge which helps to detect ongoing assessment, care and technology that made in the health care delivery system. By

conducting much research, disseminating knowledge will be given a vision for growing in Nursing discipline.

The finding of the research helps the professional Nurse and students to develop the inquiry by providing a baseline care. The general aspects of the research results can be made by further replication of the study. This research helps in Nursing research to develop in depth into the better development of Nursing care protocols and information of clients with Congestive cardiac failure towards promotion of healthy life and prevention of complication.

## **RECOMMENDATIONS**

Based on research findings the following recommendations can be made.

1. The similar research can be conducted in a larger group of samples.
2. The research can be conducted to assess the effectiveness of cardiac rehabilitation measures in reducing the recurrence of complications of congestive cardiac failure.

3. This research can be conducted to assess the effectiveness of Nursing care in modifiable risk factors of congestive cardiac failure among clients with hypertension.
4. A descriptive research can be conducted to excavate problems and institute Nursing care in clients with congestive cardiac failure.
5. Descriptive research on assessment of knowledge, attitude and practice of cardiac rehabilitation.



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## APPENDIX - I

### SECTION - A

#### Demographic variables

**1. Age group in years**

- a) 31 – 40 ☐
- b) 41 – 50 ☐
- c) 51 - 60 ☐
- d) above 61 years ☐

**2. Sex**

- a) Male ☐
- b) Female ☐

**3. Religion**

- a) Hindu ☐
- b) Muslim ☐
- c) Christian ☐

**4. Educational Status**

- a) Illiterate ☐
- b) Primary level ☐
- c) High school level ☐
- d) Graduate and Post graduate ☐

**5. Occupation**

- a) Employed ☐
- b) Agriculture ☐
- c) Business ☐
- d) House wife / Homemaker ☐

**6. Marital Status**

- a) Married ☐
- b) Widow / Widower ☐

- c) Divorced ☐
- 7. Family Income per month**
- a) upto Rs.2000 ☐
- b) Rs.2001 – 3000 ☐
- c) Rs.3001 – 4000 ☐
- d) Above Rs.4000 ☐
- 8. Personal habits**
- a) Tobacco chewing ☐
- b) Smoking and Tobacco chewing ☐
- c) Alcoholism and Smoking ☐
- d) Nil ☐
- 9. Type of dietary pattern**
- a) Vegetarian ☐
- b) Non vegetarian ☐
- 10. Co-morbid disease**
- a) Hypertension ☐
- b) Diabetes Mellitus ☐
- c) Ischemic heart disease ☐
- d) Nil ☐
- 11. Source of Information**
- a) Health personnel ☐
- b) Relatives and friends ☐
- c) Mass media ☐
- d) Others ☐



## APPENDIX – II

### Section - B

#### II. Observation Check List

S. No	ASSESSMENT	NORMAL	ABNORMAL
1	Temperature	Normal 97°F – 99°F	Abnormal < 97°F > 99°F
2	Pulse	Normal 60 – 100 beats/min	Abnormal < 60 beats/min > 100 beats/min
3	Respiration	Normal 18 – 26 breaths/min	Abnormal > 30 breaths/min
4	Blood pressure	Normal Systolic : 100 – 140 mmHg Diastolic : 60 – 90 mmHg	Abnormal Systolic : <100 – > 140 mmHg Diastolic : <60 – > 90 mmHg
5	Dyspnea	Absent	Present
6	Skin	Normal Colour of skin black or brown	Abnormal Shiny and swollen
7	Edema	Absent	Present
8	Ascitis	Absent	Present

## APPENDIX – III

### Section - C

#### RATING SCALE FOR ASSESSMENT OF PATIENT WITH CONGESTIVE CARDIAC FAILURE

S.No.	Assessment	Score	No. of Days						
			1	2	3	4	5	6	7
1.	<b>Fatigue</b>								
	a. Mild	1							
	b. Moderate	2							
	c. Severe	3							
2.	<b>Dyspnea</b>								
	a. Mild	1							
	b. Moderate	2							
	c. Severe	3							
3.	<b>Tachycardia</b>								
	a. Mild	1							
	b. Moderate	2							
	c. Severe	3							
4.	<b>Edema</b>								
	a. No edema	1							
	b. Pitting edema	2							
	c. Generalized edema	3							
5.	<b>Skin changes</b>								
	a. Cool and damp, diaphoresis	1							
	b. Shiny and swollen	2							
	c. Cyanosis	3							
6.	<b>Chest pain</b>								
	a. Mild	1							
	b. Moderate	2							
	c. Severe	3							
7.	<b>Weight gain</b>								
	a. Mild	1							
	b. Moderate	2							
	c. Severe	3							
8.	<b>Behavioural changes</b>								
	a. Restlessness	1							
	b. Confusion	2							
	c. memory loss	3							
9.	<b>Ascitis</b>								
	a. Mild	1							
	b. Moderate	2							
	c. Severe	3							

## **APPENDIX – IV**

### **Section - D**

#### **PROTOCOL FOR NURSING CARE OF CLIENT WITH CONGESTIVE CARDIAC FAILURE**

S.No.	Assessment	No. of Days						
		1	2	3	4	5	6	7
1.	Monitoring vital signs							
2.	Improving gas exchange and oxygenation							
3.	Improving cardiac function							
4.	Proper positioning							
5.	Administration of medications							
6.	Dietary management							
7.	Reducing anxiety							
8.	Health promotion							

## APPENDIX – V

### NURSING ASSESSMENT PROTOCOL FOR CLIENT WITH CONGESTIVE CARDIAC FAILURE

S.No.	Interventions	Rationale
01	<b>Cardiac functions</b> Assess vital signs <ul style="list-style-type: none"> <li>➤ Heart rate</li> <li>➤ Heart sounds</li> <li>➤ Blood pressure</li> <li>➤ Respiration</li> <li>➤ Check peripheral pulses</li> </ul>	<ul style="list-style-type: none"> <li>➤ Assessment of heart rate and sounds helps to identify the deviation from normal.</li> <li>➤ Blood pressure is measured to determine hypertension and to plan for therapeutic measures.</li> <li>➤ Peripheral pulses are evaluated for rate and volume.</li> </ul>
02	<b>ECG Monitoring</b> Assess <ul style="list-style-type: none"> <li>• Dysrhythmias</li> <li>• Left ventricular dysfunction</li> </ul>	<ul style="list-style-type: none"> <li>➤ Assessment of ST elevation QRS wave</li> </ul>
03	<b>Improving Respiratory function</b> Assess respiratory functions of the patient <ul style="list-style-type: none"> <li>➤ Respiratory rate</li> <li>➤ Rhythm</li> <li>➤ Use of accessory muscles</li> <li>➤ Dyspnea</li> <li>➤ Breath sounds</li> <li>➤ Dry cough</li> </ul>	<ul style="list-style-type: none"> <li>➤ Regular assessment helps to detect early signs of complications associated with the lungs</li> </ul>
04	<b>Administer humidified oxygen as ordered</b> Check respiratory rate at regular intervals <ul style="list-style-type: none"> <li>➤ Every 15 min for 2 Hours.</li> <li>➤ Every 30 min for next 4 hours</li> <li>➤ Every 1 hour next 6 hours</li> <li>➤ Every 2 hour till the patient gain normal respiration.</li> <li>➤ Monitor arterial blood gas analysis.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Helps to improve oxygenation of blood.</li> <li>➤ Ongoing assessment helps to identify any signs of inadequate ventilation in order to prevent hypoxia and hypercapnia</li> <li>➤ To identify respiratory acidosis</li> </ul>

05	<b>Skin colour and temperature</b> Assess for skin colour <ul style="list-style-type: none"> <li>➤ Pink colour</li> <li>➤ Pale / Cyanosis</li> <li>➤ Assess temperature of skin</li> <li>➤ Hyperthermia</li> <li>➤ Cold Moist skin or sweating</li> </ul>	<ul style="list-style-type: none"> <li>➤ Change in normal skin colour indicates deficiency in O<sub>2</sub></li> <li>➤ Temperature will be increased due to tissue destruction or may indicate responding to medication therapy</li> </ul>
06	<b>Maintaining fluid volume</b> <ul style="list-style-type: none"> <li>➤ Maintain and establish two peripheral lines</li> <li>➤ Maintain intake/ output chart properly</li> <li>➤ Assess for edema especially in dependent parts</li> </ul>	<ul style="list-style-type: none"> <li>➤ Helps to administer fluids to prevent dehydration</li> <li>➤ Identify the fluid imbalance or overload and presents complications</li> <li>➤ Edema indicates fluid overload</li> </ul>
07	<b>Gastrointestinal functions</b> Assess for <ul style="list-style-type: none"> <li>➤ Nausea / Vomiting</li> <li>➤ Restrict oral fluids if vomit persists</li> <li>➤ Auscultate bowel sounds</li> <li>➤ Check stool for blood if patient is getting anti-coagulants</li> </ul>	<ul style="list-style-type: none"> <li>➤ In acute congestive cardiac failure, nausea vomiting may be present due to vagal stimulation</li> <li>➤ To rule out complications.</li> </ul>
08	<b>Diet</b> <ul style="list-style-type: none"> <li>➤ Liquids and semisolid diet phase 1 stage that is patient in acute episode of illness and still in ICU</li> <li>➤ Advise the client and family members for low fat and low cholesterol diet.</li> <li>➤ Low sodium diet if edema present</li> </ul>	<ul style="list-style-type: none"> <li>➤ Liquid and semi solids are easy for digestion</li> <li>➤ Fat and cholesterol will increase the risk of thrombosis of carotid arteries</li> <li>➤ Sodium will increase fluid retention and edema</li> </ul>
09	<b>Prevention of complication</b> Advise the client for the following <ul style="list-style-type: none"> <li>➤ Regular medications as prescribed</li> <li>➤ Regular check up</li> <li>➤ Avoid strenuous exercises</li> <li>➤ Life style modification like avoid smoking alcohol consumption</li> <li>➤ Teach the patient and family members to check pulse and blood pressure and early signs and symptoms of congestive cardiac failure</li> </ul>	<ul style="list-style-type: none"> <li>➤ It helps to control the risk factors like diabetes mellitus, blood pressure for early detection of disease and complications</li> <li>➤ Strenuous exercise will cause chest pain</li> <li>➤ Smoking and alcohol consumption will increase risk of congestive cardiac failure</li> <li>➤ Helps for early detection of complications</li> </ul>

## **NURSING DIAGNOSIS**

1. Decreased cardiac output related to inability to pump adequate amount of blood as evidenced by generalized edema.
2. Acute pain related to increased work load of heart as evidenced by transient ECG changes occurring during pain.
3. Impaired gas exchange related to decreased cardiac output as evidenced by increased heart rate , dyspnea, impaired capillary refill.
4. Imbalanced nutrition less than body requirement related to anorexia as evidenced by dysfunctional eating patterns.
5. Fluid volume excess related to decrease cardiac out put as evidenced by pitting pedal edema, generalized edema.
6. Activity intolerance related to an imbalance between oxygen supply and demand as evidenced by weakness, dyspnea, pallor.
7. Sleep pattern disturbances related to pain, anxiety and new environment as evidenced by frequent awakening at night and tiredness.
8. Altered bowel pattern related to pharmacotherapy as evidenced by subjective feeling of fullness, abdominal cramping.
9. Fear and anxiety related to hospital admission and fear of death as evidenced by the patient and family appear restless, hostile or withdrawn.
10. Knowledge deficit regarding lack of information about disease condition and treatment regimen.

Assessment	Nursing diagnosis	Goal	Planning	Implementation	Rationale	Evaluation
<b>Subjective Data:</b> The patient complains of difficulties in breathing , suffocation and chest pain  <b>Objective Data:</b> When I saw the client is having <ul style="list-style-type: none"> <li>➤ Increased heart rate(120 BPM)</li> <li>➤ Impaired capillary refilling</li> <li>➤ Dyspnea</li> </ul>	Impaired gas exchange related to decreased cardiac output as evidenced by increased heart rate , dyspnea, impaired capillary refill.	The clients gas exchange will improve	<ul style="list-style-type: none"> <li>➤ Provide the client semifowler / fowlers position</li> <li>➤ Administer oxygen as prescribed and monitor saturation by pulse oximetry</li> <li>➤ Provide breathing exercises</li> <li>➤ Administer injection lasix 40mg and T.Cardace 20mg and note response of drugs</li> </ul>	<ul style="list-style-type: none"> <li>➤ Provided the client semi fowler / fowlers position</li> <li>➤ Administered O<sub>2</sub> – 3 liters/min as prescribed and monitor saturation by pulse oximetry.</li> <li>➤ Provided diaphragmatic breathing exercises</li> <li>➤ Administered injection lasix 40 mg and T.Cardace 20mg and note response of drugs</li> </ul>	<ul style="list-style-type: none"> <li>➤ It helps to increase antero-posterior diameter</li> <li>➤ It helps to increase the blood oxygen level</li> <li>➤ It will prevent dyspnea</li> <li>➤ It helps to reduce BP, reduce pulmonary congestion and reduce sodium and water retention.</li> </ul>	The clients vital parameters were within normal limits ,breath sounds were clear and blood gas values were in normal limit

Assessment	Nursing diagnosis	Goal	Planning	Implementation	Rationale	Evaluation
<b>Subjective Data:</b> The clients complaints of edema in legs  <b>Objective Data:</b> When I saw the client is having  ➤ Generalized bilateral and pitting pedal edema	Fluid volume excess related to decrease cardiac out put as evidenced by pitting pedal edema, generalized edema.	The clients fluid volume status will improve	➤ Monitor the fluid and electrolyte imbalance  ➤ Restrict the fluids as per order  ➤ Maintain intake and output chart  ➤ Monitor weight daily  ➤ Administer diuretics as per order	➤ Monitored the fluid and electrolyte imbalance Dehydrated , dry lips.  ➤ Restricted the fluids as per order  ➤ Maintained intake and output chart I/O – 500ml ➤ Monitored weight daily  ➤ Administered diuretics as per order	➤ Helps to correct the imbalance  ➤ Helps to prevent fluid over load  ➤ Helps to identify the fluid balance  ➤ Sudden increase in weight indicates fluid overload ➤ Helps to reduce edema	The client's fluid volume status was improved to some extent.



Assessment	Nursing diagnosis	Goal	Planning	Implementation	Rationale	Evaluation
<b>Subjective Data:</b> The client verbalized of inability to do his own activities of daily living , weak, fatigue and pain  <b>Objective Data:</b> When I saw  ➤ The client looks weak, tired and dull	Activity intolerance related to an imbalance between oxygen supply and demand as evidenced by weakness, change in vital signs, dyspnea, pallor.	The clients activity will improve	<ul style="list-style-type: none"> <li>➤ Monitor vital signs before and immediately after activity and three minutes later</li> <li>➤ Provide assistance with self care activities</li> <li>➤ Provide frequent rest periods especially after meals</li> <li>➤ Encourage to verbalize feelings or concerns regarding fatigue or limitations</li> </ul>	<ul style="list-style-type: none"> <li>➤ Monitored vital signs before and immediately after activity and three minutes later</li> <li>➤ Provided assistance with self care activities</li> <li>➤ Provided frequent rest periods especially after meals</li> <li>➤ Encouraged to verbalize feelings or concerns regarding fatigue or limitations</li> </ul>	<ul style="list-style-type: none"> <li>➤ Data on response to increase in activity vital signs should return to base line in three minutes</li> <li>➤ Helps to prevent dyspnea and increased workload</li> <li>➤ Knowing limitations prevents extension and increasing workload</li> <li>➤ Gradual increase in activity increases strength and prevents over exertion</li> </ul>	Within three to four days of admission clients showed progression normally through steps of phase , cardiac stabilization without signs or symptoms of exercise intolerance

Assessment	Nursing diagnosis	Goal	Planning	Implementation	Rationale	Evaluation
<b>Subjective Data:</b>  The client verbalized of inadequate sleep at night frequent awakening at night and tiredness  <b>Objective Data:</b> When I saw ➤ The client looked tired , frequent awakening for small sounds and restlessness	Sleep pattern disturbances related to pain, anxiety and new environment as evidenced by frequent awakening at night and tiredness.	The clients sleep pattern will improve	<ul style="list-style-type: none"> <li>➤ Provide calm, comfortable environment to the client</li> <li>➤ Do not awake clients for vital signs when his condition was stable</li> <li>➤ Provide relaxation therapy</li> <li>➤ Administer sedatives as per order</li> </ul>	<ul style="list-style-type: none"> <li>➤ Provided calm, comfortable environment to the client</li> <li>➤ Do not awake clients for vital signs when his condition was stable</li> <li>➤ Provided relaxation therapy</li> <li>➤ Administered sedatives as per order</li> </ul>	<ul style="list-style-type: none"> <li>➤ It helps to enhances sleep and reduces stimuli</li> <li>➤ It will cause disturbances and cause anxiety</li> <li>➤ Helps to reduce work load and promote sleep</li> <li>➤ It helps to reduce anxiety and improve sleep pattern there by reduce work load of heart</li> </ul>	The client verbalized that he had sound sleep after administering meditations

Assessment	Nursing diagnosis	Goal	Planning	Implementation	Rationale	Evaluation
<b>Subjective Data:</b> The clients complaints of not passed stool for 2 days, fullness of stomach and abdominal cramping  <b>Objective Data:</b> When I saw ➤ The client was on pharmaco - therapy and palpable impaction was seen	Altered bowel pattern constipation related to pharmacotherapy as evidenced by subjective feeling of fullness, abdominal cramping.	The clients bowel pattern will improve	➤ Advice not to strain during defecation  ➤ Ensure that the patient had adequate bulk in diet and adequate fluid intake  ➤ Provide privacy during defecation  ➤ Encourage to change position every two hours ➤ Administer stools softeners as per order	➤ Advised not to strain during defecation  ➤ Ensured that the patient had adequate bulk in diet and adequate fluid intake ➤ Provided privacy during defecation ➤ Encouraged to change position every two hours ➤ Administered stools softeners as per order	➤ It will increase heart work load  ➤ It helps to prevent straining  ➤ It will improve normal bowel habits ➤ It will improve the bowel motility  ➤ It helps to softens the stool and prevents staining	The client verbalized that his bowel pattern was normal and did not develop constipation after that

Assessment	Nursing diagnosis	Goal	Planning	Implementation	Rationale	Evaluation
<b>Subjective Data:</b>  The client verbalized of anxiety and worries about his condition and his family members  <b>Objective Data:</b> When I saw ➤ The client appeared restless, anxious , repeatedly asking questions about his conditions	Fear and anxiety related to hospital admission and fear of death as evidenced by the patient and family appear restless, hostile or withdrawn.	The clients fear and anxiety will reduce	<ul style="list-style-type: none"> <li>➤ Provide psychological support</li> <li>➤ Allow and encourage the patient and family to ask questions, do not avoid questions and bring up common concerns</li> <li>➤ Allow patient and family to verbalize</li> <li>➤ Explain all the procedures or interventions before performing</li> <li>➤ Use flexible visiting hours</li> </ul>	<ul style="list-style-type: none"> <li>➤ Provided psychological support</li> <li>➤ Allowed and encouraged the patient and family to ask questions, do not avoid questions and bring up common concerns</li> <li>➤ Allowed patient and family to verbalize</li> <li>➤ Explained all the procedures or interventions before performing</li> <li>➤ Used flexible visiting hours</li> </ul>	<ul style="list-style-type: none"> <li>➤ It helps to reduce anxiety</li> <li>➤ It helps to reduces fear, strengthens the patient nurse relationship</li> <li>➤ Sharing information elicits support and comfort and can relieve tension and worries</li> <li>➤ Explanation helps to get cooperation and reduces anxiety</li> <li>➤ Provide psychological support to clients</li> </ul>	The client exhibited signs of effective coping and progression through the stages of nursing

Assessment	Nursing diagnosis	Goal	Planning	Implementation	Rationale	Evaluation
<b>Subjective Data:</b> The client complains of chest pain  <b>Objective Data:</b> When I saw, ➤ The client is having Restlessness , irritability and facial grimaces changed	Acute pain related to increased work load of heart as evidenced by transient ECG changes occurring during pain.	The clients pain will minimize	➤ Monitor the characteristics of pain  ➤ Monitor the vital signs  ➤ Provide comfortable position  ➤ Administer oxygen as prescribed  ➤ Teach relaxation techniques, breathing exercises  ➤ Administer analgesics	➤ Monitored chest pain is present  ➤ Monitored the vital signs HR=100 bts/min  ➤ Provided fowler's position  ➤ Administered O <sub>2</sub> – 3 ltrs/min  ➤ Taught relaxation techniques, breathing exercises  ➤ Administered analgesics Beta blockers	➤ Helps to know the general condition of client  ➤ Helps to identify the deviation in Blood pressure and Heart rate  ➤ It helps to provide comfort  ➤ It helps to improve arterial saturation  ➤ It helps to reduce pain  ➤ It helps to decrease heart rate	The client verbalizes ability to tolerate pain

Assessment	Nursing diagnosis	Goal	Planning	Implementation	Rationale	Evaluation
<b>Subjective Data:</b> The clients complaints of giddiness  <b>Objective Data:</b> When I saw The client looks → dull → Weak	Decreased cardiac output related to inability to pump adequate amount of blood as evidenced by generalized edema.	The clients cardiac output will improve	<ul style="list-style-type: none"> <li>➤ Monitor heart rate and blood pressure</li> <li>➤ Assess the peripheral pulses</li> <li>➤ Administer oxygen</li> <li>➤ Maintain adequate ventilation and perfusion</li> <li>➤ Restrict activity, provide quite relaxed environment</li> <li>➤ Administer stools softeners as per order</li> </ul>	<ul style="list-style-type: none"> <li>➤ Monitored heart rate and blood pressure BP=140/90</li> <li>➤ Assessed the peripheral pulses</li> <li>➤ Administered oxygen</li> <li>➤ Maintained adequate ventilation and perfusion</li> <li>➤ Restricted activity, provided quite relaxed environment</li> <li>➤ Administered stools softeners as per order</li> </ul>	<ul style="list-style-type: none"> <li>➤ Helps to know the baseline data</li> <li>➤ Weak pulse indicate decrease cardiac output</li> <li>➤ It helps to meet oxygen demands</li> <li>➤ It helps to meet oxygen demands</li> <li>➤ Helps to reduce oxygen demand</li> <li>➤ It helps to softens the stool and prevents staining</li> </ul>	The client cardiac output was improved

Assessment	Nursing diagnosis	Goal	Planning	Implementation	Rationale	Evaluation
<b>Subjective Data:</b> The clients complaints of loss of appetite  <b>Objective Data:</b> When I saw The client looks → Tired → Weak	Imbalanced nutrition less than body requirement related to restricted diet as evidenced by dysfunctional eating patterns	The clients nutrition pattern will improve	<ul style="list-style-type: none"> <li>➤ Assess the nutritional status</li> <li>➤ Monitor the weight of the client</li> <li>➤ Obtain the nutritional history</li> <li>➤ Maintain intake and output chart</li> <li>➤ Provide sodium restricted diet</li> <li>➤ Restrict fatty diet</li> <li>➤ Restrict the fluids as per order</li> </ul>	<ul style="list-style-type: none"> <li>➤ Assessed the nutritional status</li> <li>➤ Monitored the weight of the client Weight =70</li> <li>➤ Obtained the nutritional history</li> <li>➤ Maintained intake and output chart</li> <li>➤ Provided sodium restricted diet</li> <li>➤ Restricted fatty diet</li> <li>➤ Restricted the fluids as per order</li> </ul>	<ul style="list-style-type: none"> <li>➤ Helps to know the general condition</li> <li>➤ Helps to identify weight loss/gain</li> <li>➤ Helps to know the nutritional status</li> <li>➤ Helps to know dietary pattern</li> <li>➤ It helps to decrease hypertension</li> <li>➤ Helps to reduce cholesterol levels</li> <li>➤ It helps to reduce edema</li> </ul>	The client cardiac output was improved

Assessment	Nursing diagnosis	Goal	Planning	Implementation	Rationale	Evaluation
<p><b>Subjective Data:</b> The client and family members verbalized of fear and anxiety and they did not know about the disease and treatment</p> <p><b>Objective Data:</b> The client and family members were repeatedly asking about disease condition, treatment and prognosis`</p>	Knowledge deficit regarding lack of information about disease condition and treatment regimen.	The clients knowledge will improve	<ul style="list-style-type: none"> <li>➤ Explain the client and family members about the anatomy and physiology of heart and coronary circulation.</li> <li>➤ Explain the risk factors and causes.</li> <li>➤ Explain the signs and symptoms , diagnostic procedures and early management of congestive heart failure .</li> <li>➤ Explain the client and family members about prevention of further episodes</li> </ul>	<ul style="list-style-type: none"> <li>➤ Explained the client and family members about the anatomy and physiology of heart and coronary circulation.</li> <li>➤ Explained the risk factors and causes</li> <li>➤ Explained the signs and symptoms , diagnostic procedures and early management of congestive heart failure</li> <li>➤ Explained the client and family members about prevention of further episodes.</li> </ul>	<ul style="list-style-type: none"> <li>➤ Use of multiple learning method enhances retention of material information helps client to understand the underlying problems and overall heart functions.</li> <li>➤ Explaining in simple language helps to identify the risk factors easily.</li> <li>➤ Explanation will help to identify the disease early and get treated and prevent complications .</li> <li>➤ Explanation will help to prevent complications.</li> </ul>	The client and family members were receptive to all the instructions given



## **APPENDIX - VI**

### **CASE ANALYSIS**

#### **DEMOGRAPHIC DATA:**

Sample No.1

Gender : Male  
Age : 38  
Religion : Hindu

#### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain, edema and fatigue. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.2

Gender : Male  
Age : 40  
Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain and edema. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.3

Gender : Male  
Age : 44  
Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain and fatigue. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.4

Gender : Male  
Age : 48  
Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of chest pain, edema and fatigue. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the client's vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.5

Gender : Male

Age : 46

Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, edema and fatigue. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.6

Gender : Male  
Age : 47  
Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain, edema and fatigue. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.7

Gender : Male  
Age : 42  
Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain and edema. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.8

Gender : Male  
Age : 55  
Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain, edema and fatigue. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.



## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.9

Gender : Male

Age : 55

Religion : Muslim

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain, edema and fatigue. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.10

Gender : Male

Age : 58

Religion : Christian

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain and fatigue. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.11

Gender : Male  
Age : 52  
Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain and fatigue. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.12

Gender : Male  
Age : 53  
Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain and edema. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.13

Gender : Male

Age : 57

Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, edema and fatigue. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.14

Gender : Male

Age : 56

Religion : Christian

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain, edema and fatigue. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.15

Gender : Male

Age : 55

Religion : Muslim

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of chest pain, edema and fatigue. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.16

Gender : Male  
Age : 58  
Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain and fatigue. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.



## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.17

Gender : Male

Age : 55

Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain, edema and fatigue. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.18

Gender : Male

Age : 68

Religion : Muslim

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain, edema and fatigue. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.19

Gender : Male

Age : 61

Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain and edema. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.20

Gender : Male  
Age : 65  
Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain and edema. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.21

Gender : Male

Age : 64

Religion : Christian

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain and edema. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.22

Gender : Male  
Age : 66  
Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain and edema. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.23

Gender : Male  
Age : 68  
Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain and edema. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.24

Gender : Male

Age : 62

Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain and edema. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.



## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.25

Gender : Male

Age : 67

Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain and edema. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.26

Gender : Male  
Age : 69  
Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain and edema. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.27

Gender : Male  
Age : 72  
Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain and edema. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.28

Gender : Male  
Age : 68  
Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain and edema. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.29

Gender : Male  
Age : 65  
Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain and edema. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## **CASE ANALYSIS**

### **DEMOGRAPHIC DATA:**

Sample No.30

Gender : Male

Age : 62

Religion : Hindu

### **NURSING INTERVENTIONS**

The client was admitted with the complaints of breathing difficulty, chest pain, edema and fatigue. He was diagnosed as congestive heart failure as evidenced by clinical symptoms and laboratory reports. On the first day the clients score was 27, which were assessed by the structured assessment rating scale. Nursing care was given according to the needs of the client, based on the protocol. Each day the clients vital parameters were checked and scored on the seventh day the client's condition was stable and his score was 15 which were assessed by the structured assessment rating scale.

## NURSING CARE ON CLIENTS WITH CONGESTIVE CARDIAC FAILURE



**Maintaining fluid and electrolyte balance**



**Administering oxygen**





**Administering medications**



**Assessing vital parameters**